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Playground Games was established in 2009, bringing together some of the most experienced and talented developers from the UK games industry, with the vision to create big budget console titles for a global audience. Six years on we now occupy three floors in our state of the art studio in the centre of Leamington Spa, with more than 100 staff making up the Playground family.

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FORZA HORIZON 2

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Playground Games™

develop

ISSUE 163 AUGUST 2015

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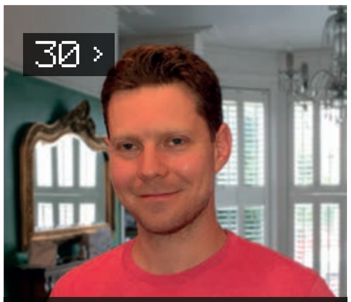

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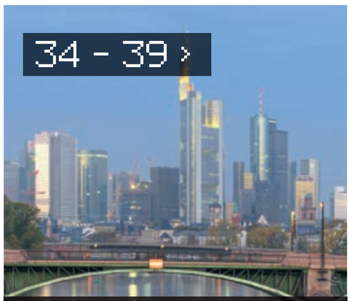

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EDITORIAL

HOW MUCH DO YOU SHARE?

I HAD TWO interesting but opposing conversations at this year's Brighton conference: one with Rare co-founder Tim Stamper, the other with 22Cans' new CEO Simon Phillips.

Stamper, when discussing the levels of secrecy he and his brothers are notorious for, said he feels it is better to spend time developing your ideas and your game than talking to the press. There is plenty of time to discuss things about your game once it's released.

Phillips, meanwhile, faces the unenviable task of repairing the reputations of both Peter Molyneux and his studio after the controversy around *Godus* earlier this year. 22Cans makes a strong case that is has been perfectly transparent about the progress of *Godus* from the beginning – but perhaps that's part of the problem. Maybe gamers grew impatient, unable to fully grasp what the team were trying to accomplish, and lashed out.

So how much do you share? Many studios are releasing every little piece of info about their game to drive interest ahead of launch, but should these cards be played closer to the chest?

Vlambeer's Rami Ismail made another key point during his keynote: over-sharing simplified information can make things harder for other devs. If you imply that features are being added easily to your game, players will never understand the hard work that goes into development. What will happen is their expectations will rise, and those will be even tougher to meet for hard-working devs.

James Batchelor
jbatchelor@nbmedia.com

What happened to the MMO?

Former Blizzard chief creative officer Rob Pardo on why other publishers have struggled to replicate the success of the studio's hit online game World of Warcraft, and the impossible expectations that have arisen from its legacy

by Craig Chapple

DEVELOPERS AND PUBLISHERS are avoiding the term MMO to describe their games due to the level of expectation that comes with the genre, says former Blizzard chief creative officer Rob Pardo.

Speaking to *Develop* at the recent Games First Helsinki event, Pardo said massively multiplayer online games have expanded and evolved away from how people used to describe them. He said following the runaway success of *World of Warcraft* after its launch in 2004, a game that still boasts some 7m users to this day, a wave of companies tried to copy the winning formula. Not one of these were able to replicate the same level of success, however.

Pardo believes developers have now given up trying to do the same kind of MMO.

FEAR OF EXPECTATION

"What you're starting to see now is people are creating persistent world games with lots of players," he said. "But different types of games and different types of gameplay, rather than trying to create the same type of game as *World of Warcraft*.

"If anything, I think people are even avoiding the term MMO. A really good example is *Destiny*. It clearly is an MMO. But they're really trying to avoid calling it that, and obviously it is a very different type of game. But I think that's a good example of how with MMOs, the term has been eliminated. But you kind of continue to see the influence in games that are persistent world games that have spawned out of that. It's just people seem to avoid the term MMO now."

Pardo said publishers are largely avoiding the term to evade comparisons with *World of Warcraft* and the general expectations that come with making MMOs. EA's *Star Wars: The Old Republic* famously struggled to attract players – the definition of this criticism partially stemming from comparisons to Blizzard's hit. NCSoft's *WildStar* is another that couldn't hit the same level under the MMO banner, and has now gone free-to-play.

One major factor holding many MMOs back is also what made the genre popular. Pardo says its rare to see a breakout hit in a genre ever replicated, though shooters have become an exception to the rule. He identifies Riot Games' *League of Legends* as an example in the MOBA genre. It's a space even Valve has had trouble replicating in terms of sheer scale.

He added that these leaders in their genres make it difficult for new entries to make headway – despite promising what seems like a new market ripe for picking.

"You couldn't come out with *WoW* to the exact same feature-set today – it would get crushed by what *WoW* is ten years later," said Pardo. "That's one of the challenges with trying to compete at that genre. It's not just competing against the five-year development cycle it took to make *WoW*, you're competing against 15 years of development."

MMO TITANS

Though it was never officially announced, Blizzard was at work for seven years on a new MMO under the codename *Project Titan*. However, the self-described ambitious game was scrapped in 2014. The studio claimed it hadn't hit the level of quality and fun it was after.

Pardo said that though unfortunate, *Project Titan* is one of a number of examples of canned games at Blizzard, along with the likes of *StarCraft: Ghost* and *WarCraft Adventures*.

> ***I think people are avoiding the term MMO. Destiny is a good example.***
>
> Rob Pardo

He stressed that *Project Titan's* cancellation wasn't a disbelief in the MMO genre, however.

"I think there's still a big belief within Blizzard that MMOs are a great genre to be in," said Pardo. "But I think that the other thing to keep in mind with something like when we started *Project Titan* at least, we never had an expectation that *WoW* would have this many subscribers ten years later.

"So I think that another thing is we kind of had expected probably by this point that all the *World of Warcraft* developers would be on *Titan* or on other games at the studio and that never really happened, which was very fortunate.

"But I think that allowed making decisions on games within the studio that made sense, and they still got to stay in the MMO market." ■

// MEANWHILE ON DEVELOP-ONLINE.NET

Develop Awards 2015: Watch the acceptance speeches and opening video
deve1op.net/1CMYzM6

Video: Remembering Nintendo president Satoru Iwata
deve1op.net/1gF0V5v

Nuke's non-commercial licence: What it means for games developers
deve1op.net/1FUSGH6

'Stop calling me a female CEO'

The head of Cities: Skylines studio Colossal Order says the industry still has a way to go before 'true gender equality'

by James Batchelor

MARIINA HALLIKAINEN URGES the industry to pay less attention to gender and more to ability if we are ever to present equal opportunities to all aspiring games-makers.

The CEO of Colossal Order, the studio behind the smash hit *Cities: Skylines*, says she objects to the focus on her success as a woman in the games industry, insisting that it is her business prowess that has put her where she is today.

"We'll have true equality when people stop calling me a female CEO, and when we start looking into what people are good at and what they're comfortable doing," she told *Develop*. "I don't think making good games has anything to do with gender.

"I've been asked to talk at a lot of conferences, asked to explain my position as a woman in the games industry. I'm a CEO – that position has nothing to do with my gender. It's very frustrating to me.

"I feel that we should be able to look beyond that, and at what people are good at. But to get there, I do feel that it's extremely important for young girls – and boys as well – to see that there is a very diverse group of people making games."

Hallikainen referenced the studio's lead designer Karoliina Korppoo as another example.

"She is very goth and has a very specific look – but that has nothing to do with her work in developing games," she said. "Your sexual orientation doesn't really matter, either. These are the kind of things that people put so much effort into wondering about, but it has nothing to do with the work itself.

"When we can start looking at people's skillset rather than their appearance – that's where this industry is supposed to be heading."

The Colossal Order CEO acknowledged that it is beneficial for people both within and beyond the industry to see female role models, as this will encourage more girls to consider a career in games.

"What I think what is happening now is that when we have female role models, girls can actually see that there are women in the games industry," she says. "So I'll think we'll see more of them.

"But a large part of it is to do with how girls are brought up. Is it still the case that parents buy computers for the boys and dolls for the girls? I don't know. We happen to have a lot of girls [at Colossal Order] who happen to have grown up in less conservative families. I was never restricted by the idea that there's only women in certain industries."

> ***I'm a chief executive officer – that position has nothing to do with my gender. It's very frustrating to me.***
>
> Mariina Hallikainen, Colossal Order

Hallikainen's studio has a remarkably balanced workforce, with close to a third of its team comprised of women. But she says there has not been an intentional focus on hiring more women.

"We just search for the best person for each job," she said. "Maybe the fact I am a woman means we get more applications from women than other studios – I can't be sure of that. Is it just that we happen to have found that the best people to apply for our jobs have been women? We haven't really put extra effort into specifically finding women for the company because we always aim for the best possible person." ■

DEVELOP DIARY

Your complete games development events calendar for the months ahead

AT A GLANCE

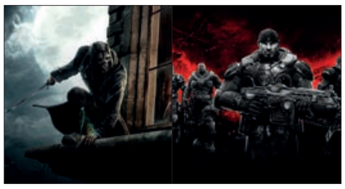
AUGUST 4TH
Rare Replay
Yes, you can finally play *Jet Force Gemini*. And *Blast Corps* again. Woohoo.

AUGUST 5TH
Gamescom
The rest of the industry will be there, so you may as well come, too.

AUGUST 6TH
Fantastic Four
Seriously? Have we not run out of superhero films yet?

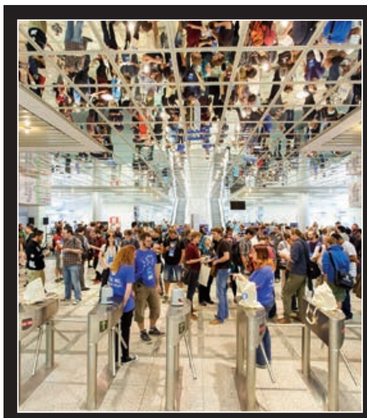
AUGUST 19TH
National Aviation Day
Celebrate the birthday of Orville Wright by giving the finger to gravity.

AUGUST 27TH
Hitman: Agent 47
Let's see if Hollywood can get it right this time. No, we don't think so either.



AUGUST 28TH
Remasters galore!
But which shiny not-new game do you buy? *Dishonored* or *Gears of War*?

DIARY DATES



GDC Europe 2015
August 3rd to 4th
Cologne, Germany
www.gdceurope.com

AUGUST

GAMESCOM
August 5th to 9th
Cologne, Germany
www.gamescom-cologne.com

SIGGRAPH
August 9th to 13th
Los Angeles, USA
s2015.siggraph.org

CASUAL CONNECT USA
August 11th to August 13th
San Francisco, USA
usa.casualconnect.org

PAX DEV
August 26th to 27th
Seattle, USA
dev.paxsite.com

SEPTEMBER

LEGENDS OF GAMING LIVE
September 4th to 6th
London, UK
www.legendsofgaming.co.uk

GAME MUSIC CONNECT
September 15th
London, UK
www.gamemusicconnect2015.com

TOKYO GAME SHOW
September 17th to 20th
Tokyo, Japan
expo.nikkeibp.co.jp/tga/2015

UNITE BOSTON
September 21st to 23rd
Boston, USA
unity3d.com/unite/boston

EVENT SPOTLIGHT

SIGGRAPH 2015

The graphics conference returns to Los Angeles between August 9th and 13th, increasing its focus on games.

The five-day event will once again see experts from multiple disciplines discussing the latest trends and techniques in computer graphics, along with a three-day exhibition.

This year, the games industry's presence is stronger than ever. PlayStation, Xbox, EA, Activision and Square Enix will all be on hand to showcase their work, and there's a growing indie entourage as well. *Lumino City* creator and Develop Award winner State of Play Games, *Braid* dev Jonathan Blow and Q Games will also be attending.

The possibilities afforded by virtual reality will be explored in the VR Village, with Oculus Rift, Unity Technologies and Epic Games all showing their support. There will also be panels on VR production with experts from both games and film.

Finally, the Computer Animation Festival will feature some of the year's best trailers and shorts, including some from the games space.

You can find out more by heading to: **s2015.siggraph.org**. ■

> ***"This year, the games industry presence at SIGGRAPH 2015 in Los Angeles will be stronger than ever."***

COMING SOON

DEVELOP #164
SEPTEMBER 2015

- eSports Special: How to develop for pro gamers
- The sound of music: A look at creating that perfect soundtrack for your game

DEVELOP #165
OCTOBER 2015

- Training Special: Looking to level up your staff? Keen to add new skills to your arsenal? We explore all of the options, from university to mentoring

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//COMMENT: BUSINESS

Mobile gaming finally grows up

Nick Gibson reflects on how the UK games industry has changed over the past year

THE UK GAMES development industry set a number of records last year, according to TIGA's most recent state of the UK industry report, written by Games Investor Consulting.

The UK has never housed so many games development companies as it did at the end of 2014 (664), never employed so many games development staff (10,869), and never made such a large economic contribution (adding over £1.1bn to the UK's GDP).

While 2013 also set welcome records, its growth was economically and structurally precarious, built on the shifting sand of spin-outs and start-ups with increased risk of mortality. In contrast, 2014's achievements are underpinned by some radically different dynamics, most notably the long-overdue maturation of the UK's mobile games development scene.

2013 will be remembered as the year the UK games development industry went start-up crazy. An astounding 224 companies entered the games development business that year, driving employment levels to new highs despite a concurrent and major spike in games developer closures. The majority of these new studios were mobile games developers, often micro studios with fewer than five employees.

But equity funding for UK developers did not spike in parallel, which meant that – in the space of a year – a material proportion of the UK development industry was transformed into tiny and self-reliant new companies, trusting in individual savings and optimism that self-publishing would pay off. A big opportunity, certainly, but an even bigger risk.

MOVEMENT IN MOBILE

Fast-forward a year and we see two significant trends emerging from this risky state of affairs.

The most important is the fact that the medium-to-large scale developers have started to grow again, and it's these companies with 15 or more development staff who are driving growth, not start-ups. A number of earlier start-ups have moved into this tier, increasing the number of medium-to-large firms, but the numbers employed at such companies also grew significantly last year.

This was driven by several factors, but perhaps the biggest was the expansion of so many mobile studios – more often than not driven by commercial success but often also supported by equity fundraising, trade sales and even the odd flotation.

Goals:
8
x1
Combo!
x1.2
Moves
24
ILY BUGLE

Studios moving into mobile drove much of the growth the UK games industry saw last year, with hits from both here and overseas proving how studios can find success on smart devices

> ***2014 represented a breakthrough, with a raft of UK developers launching lucrative F2P games.***
>
> Nick Gisbon, Gunjin Games

Mobile gaming has been a vast opportunity for many years but the UK had been conspicuously slow to adjust to this rapidly evolving corner of the games market.

Although the UK has had mobile games developers since the WAP gaming days, very few had achieved significant scale, some getting stuck in work-for-hire and many slow to adapt to best practice mobile commercial strategies such as free-to-play models and games-as-a-service. 2014 therefore represented a breakthrough in this respect with a whole raft of UK developers launching highly revenue-generative F2P mobile games and growing off the back of them.

At the other end of the scale, a significant number of mostly smaller developers abandoned mobile for other platforms, most often PC. Enticed by reports of vast revenues generated by a handful of ostensibly simple games with supposedly limited budgets, many individuals and small teams decided between 2012 and 2013 to seek their fortunes in mobile games development and self-publishing.

This gold rush appears to have come to an end last year when the proportion of UK developers primarily focused on mobile fell to 48 per cent, ending four years of sustained growth for the mobile and tablet platform category.

Furthermore, where mobile had been the platform of choice for start-ups for multiple years, PC became the most popular platform category for new developers in 2014. It seems that start-ups are less put off by the challenges in the mobile market than they are for other categories such as PC.

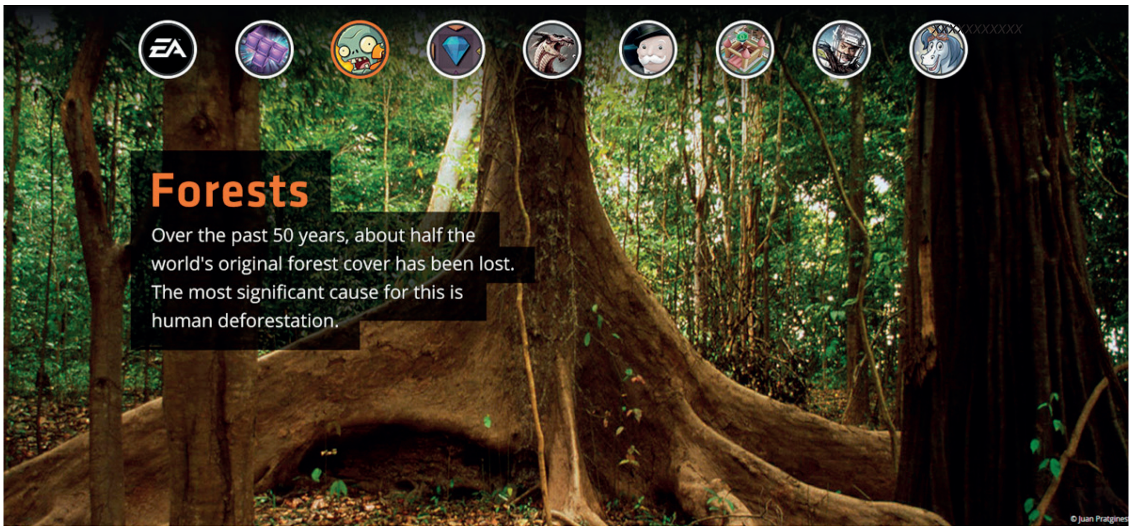
So the UK's mobile scene has experienced a fiery path towards maturity; from hundreds of start-ups, a robust and often highly sophisticated group of medium-to-large developers has emerged. The under-capitalised and insufficiently resourced have begun to drop out or move on and the more commercially astute and better funded are starting to thrive. This paints a picture of a more stable UK industry in rude health with strong growth potential, but we wonder if the same fate awaits the crowded PC scene. ■

Nick Gibson is the commercial director of Gunjin Games, a mobile and tablet games studio staffed by veteran developers based in Brighton, UK.
www.gunjingames.com

//COMMENT: CHARITY

Why President Obama might be wrong

Playmob's **Lee Hinds** discusses the great fundraising work of video games firms from around the world



Forests

Over the past 50 years, about half the world's original forest cover has been lost. The most significant cause for this is human deforestation.

In January EA launched a multi-game campaign with international charity WWF to raise awareness and money to protect endangered species

A FEW WEEKS ago, I was one among many who had the privilege of watching the brilliantly candid discussion – as filmed by the BBC – between our very own national treasure, Sir David Attenborough and the President of the United States of America, Barack Obama.

During the 35-minute back and forth they spoke to their admiration for one another, their mutual passion for nature, and the steps current and future generations must take in order to help protect our planet.

Part way through their discussion the topic turned towards getting children away from their computer screen and getting 'back to nature'. This is so they could enjoy all of the delights the great outdoors affords whilst obtaining a certain amount of empathy towards the ongoing struggles the planet is facing; such as global warming, deforestation and overpopulation.

Sir David took some time to marvel at the diverse nature of America's landscape, remarking on the glaciers in Alaska and Yosemite National Park in California.

The President then took the opportunity to state: "What we've been doing is trying to initiate ways to get more children and young people to use the parks. And as you've said, so many of these kids are growing up cut off, they're sitting on the couch, they're playing video games. If they experience nature, it's through a television screen. Just getting them out there so that they're picking up that rock and finding that slug, they're seeing that, that bird with colours that they haven't seen before".

Now as a sentiment I fully agree. Going outside to enjoy the natural beauty this planet offers on a daily basis is a must. And like the USA, Britain is fortunate enough to have some fantastic National Parks of its own, all of which should be visited and enjoyed.

However I did come away feeling like there was an unspoken truth within that statement.

Video games are playing an increasingly active role in supplying much needed education and raising vital funds to help mitigate and overcome the dangers that threaten our planet.

SUPPORTING GOOD CAUSES

For example, Humble Bundle has given over $50m to date to various charities around the globe. The money donated has specifically gone towards helping people with disabilities enjoy games, providing emergency medical aid, funding healthcare, purchasing books for schools in Africa, providing clean water to developing countries and much more.

One of the many beneficiaries of Humble Bundle's fundraising has been the World Land Trust, an International Conservation Charity, who have received over £385,000 in donations since May 2012.

Sir David Attenborough himself was quoted at a lecture in January 2012 stating: "The money that is given to the World Land Trust, in my estimation, has more effect on the wild world than almost anything I can think of".

Whilst this quote is not in direct relation to Humble Bundle's donation, it does clearly highlight that money raised by the industry is being distributed to vital conservation areas.

In November 2014, Rovio partnered with United for Wildlife to raise awareness of illegal poaching. A tournament was added to *Angry Birds Friends*. In January 2015, EA undertook a multi-game campaign with the international charity WWF to raise awareness and funds for endangered species and conservation. It raised $117,919.

These are a few examples of how the industry has applied its vast influence for the greater good of our planet. Whilst I agree that getting kids 'back to nature' is a good thing, I don't think that the time playing games is bad. ■

//EXTRA CONTENT ONLINE

"We ended the Steam free weekend promotion for *Fractured Space* having attracted just shy of 270k new downloads."

Benefits of a Steam free weekend

Sam Faulkner, Edge Case Games

deve1op.net/1NVpmqu

"Mainstream board games are still reeling from the competition of apps and will probably never recover."

How video games both killed and improved the board game

Dugald Keith, Baffles The Fox

deve1op.net/1JucOSN

"The application process and the management of the project once you receive funding can be complex and time consuming."

The funding landscape minefield

Ella Romanos, Tenshi Grants

deve1op.net/1LVNsSU

To see all of our reader blogs visit: www.develop-online.net | Email cchapple@nbmedia.com to contribute your own blog

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DEVELOPMENT FEATURES, INTERVIEWS, ESSAYS & MORE

DEVELOP AWARDS 2015: AND THE WINNERS ARE...

Highlights and quotes from the night

P15

……

HIS STORY

We interview Sam Barlow about the making of his acclaimed title, Her Story

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……

REGION FOCUS: FRANKFURT

A six-page look at one of Europe's most promising games hubs

P34

INDUSTRY EXCELLENCE AWARDS 2015
develop
unity
KEYWORDS
STUDIOS
amiqus
UNIVE
SPEA
Games
Aardvark

Tim Stamper attended this year's Develop Awards to accept the Development Legend prize on behalf of himself and his brother Chris, soft-launch their new mobile game and drop a few hints about the duo's next big project

Return of a Legend

The acclaimed Stamper brothers broke their years of silence to accept the prestigious Development Legend award. **James Batchelor** spoke to Tim Stamper about the duo's illustrious past, their cat-themed present, and their mysterious future

YOU WOULD BE hard pressed to find a developer that has never played a game by the Stamper brothers.

With a career spanning more than 30 years and over 100 games, the pair have directly influenced gamers and games-makers the world over – making them fitting winners for Development Legend at this year's Develop Awards.

The very mention of the Stamper brothers evokes memories of Rare's titles for Xbox and Nintendo platforms, or – for the earliest gamers – Ultimate Play The Game. But the duo started considerably earlier than this, at the height of the coin-op industry and before the dawn of consoles.

"We were working in the coin-op industry, repairing boards and looking at how people change software to make different things happen on the screen," Tim Stamper tells *Develop*. "That's really how we got into it, that was in the late '70s to early '80s.

"We worked for a couple of companies, working on conversions on *Space Invaders* and *Galaxian* boards. We started writing software on other people's hardware, and then selling the coin-op conversions for new products."

Keen to continue developing games, the Stampers set up their own publishing label, Ultimate Play The Game. Rather than dedicating themselves solely to coin-op boards, they began exploring the possibilities of creating titles for new and emerging platforms, such as the Sinclair ZX Spectrum.

> ***"Rare's goal was to make products that you wouldn't see for years available as soon as possible."***
>
> Tim Stamper, FortuneFish

"It looked pretty interesting, so we started to write games for it," Stamper recalls. "Because of our experience writing for very restricted pieces of hardware, doing so for Sinclair was a natural progression for us.

"That ability then enabled us to transfer straight to the Nintendo Entertainment System – or Famicom as it was known in Japan. We got hold of a very early Famicom, before they sold 1m units, and thought we

Chris and Tim Stamper are famed for creating some of the most popular games the UK has every produced – including Goldeneye, Banjo-Kazooie, Diddy Kong Racing and Viva Pinata. The duo's new title, Cat Logic (far right) – developed by a new studio run by Tim's son – is significantly different

could write some software for it. That's when we set up Rare.”

Rare is, of course, the studio that the Stampers are best known for. Still going strong and marking its 30th anniversary this summer, the firm is still fondly remembered by millions for its early Nintendo titles: *Battletoads*, *R.C. Pro-Am* and countless licensed titles such as *WWF Wrestlemania* and *Who Framed Roger Rabbit*.

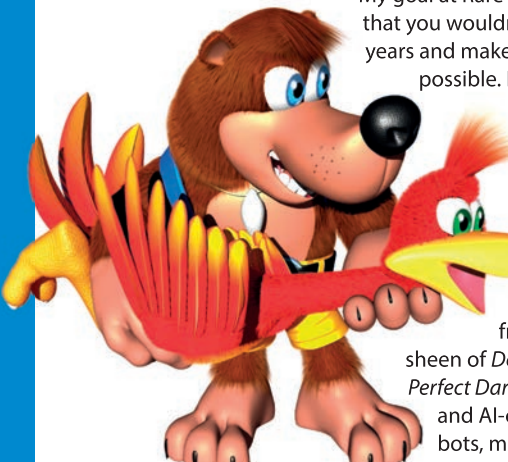
The Stampers' partnership with Nintendo continued as the platform holder released new devices, with the arrival of the superior Super Nintendo Entertainment System enabling the creation of *Killer Instinct* and *Donkey Kong Country*.

The leap into 3D gaming with the Nintendo 64 brought about yet more revered Rare titles, from the timeless *Goldeneye* to *Banjo-Kazooie* and *Conker's Bad Fur Day* – titles that media and consumers alike said rivalled Nintendo's own output for quality and inventiveness.

A RARE BREED

For many Rare fans, these are the titles that define the studio, but how does Stamper himself define it?

“To me, Rare was innovative thinking and innovative product,” he says.



“My goal at Rare was to bring products that you wouldn't see for six to eight years and make it available as soon as possible. I always wanted to produce the very best product we could on the very best system.”

It's a goal that few could argue wasn't accomplished: from the graphical sheen of *Donkey Kong Country* to *Perfect Dark*'s counter-op mode and AI-controlled multiplayer bots, most of Rare's titles were ahead of their time.

It is surprising, then, that Nintendo never moved to fully acquire the studio, instead settling for keeping it close as a second-party developer. Certainly, Stamper is perplexed as to why the platform holder never brought them into the fold.

“I've no idea why they didn't do that,” he admits. “I thought we were a good fit.”

THE SHIFT TO XBOX

While Nintendo remained a strong and valuable partner for Rare, the Stampers had their sights set on bigger things. Change was in the air.

“The price of software development was going up and up with the platforms, and Rare works really well with a partner,” says Stamper. “We were looking for someone to help broaden our horizons.”

> ***“A day spent doing an interview is a day not spent on development and design – and that bothers me.”***
>
> Tim Stamper, FortuneFish

That someone turned out to be Microsoft, which forked out a whopping $375m to completely own the UK developer – at the time a new record for high-value acquisitions.

While Nintendo fans were devastated by the news, it gave both the Stampers and their staff the chance to work on new titles for the larger, more mature audience that Microsoft was attracting.

Rare's output on the original Xbox was minimal – just two titles – but it became one of the most prolific first-party studios on Xbox 360, reviving the *Perfect Dark* and *Banjo-Kazooie* series as well as inventing new IP such as *Viva Pinata* and *Kinect Sports*.

Stamper looks back on this period fondly: “I like Microsoft. They had a great system, and there's a lot of good people at Microsoft.”

In 2007, Tim and Chris Stamper made the shock announcement that they were leaving Rare – the studio they had nurtured for more than 20 years – to “pursue other opportunities”.

Tim Stamper says that, as with the Microsoft acquisition, change was necessary.

“Chris and I needed to take a new direction to produce some better, greater products for the future, and we thought the only way we'd be able to do that was to take a step sideways and pursue a new venture.”

PASTURES NEW

The first hint at that new venture is FortuneFish, a new Nottingham-based mobile studio that set up shop back in 2013. The company is headed up by Joe Stamper – Tim's son – but the elder Stamper says FortuneFish is just one piece of the puzzle.

“There are actually a number of new ventures,” he says. “FortuneFish is run by a few guys – I'm an investor in FortuneFish and so is Chris. I spend some of my time there, and it's being run by Joe and a chap called Phil Popejoy. That's been going for two years, and it's going well.

“Joe's been involved since he was a baby. He was our first junior games tester – he knows games in and out, and knows the thorough history of all of our products. Joe's well versed in working on new, unique products and keeping them secret.”

So far FortuneFish's output includes two mobile titles: physics-based puzzle game *That Bouncy Thing* and maths puzzler *Cat Logic*, a title that was soft-launched in the UK during the Develop Awards.

Based solely on these two titles, FortuneFish seems to be a different beast to the Rare of old – and perhaps rightly so. It is, after all, a new studio for a new age. But would it even be possible to set up a company that captured that Rare magic?

“I don't think it would be difficult,” says Stamper. “You can still produce a studio like Rare; it would just need to have its own direction, its own idea stream and product stream.

Dr Wiggles
Cat Logic

"Ultimate and Rare made dramatic changes to the type of software available throughout their history and that's why I don't really want to sit back and look at what's been done before. We need to push forward to the future – that's why the move from Microsoft was made, that's what I'm doing now, and that's what I've been doing with Chris for the last eight years or so."

THE STAMPERS' RETURN

Further proof that it's possible to set up a 'new Rare' came earlier this year in the form of Playtonic Games, a group of ex-Rare developers determined to build new games in the style of the Stampers' classics. Tim deems it "a great honour" that such a studio has been set up, but he has avoided any news of the *Banjo-Kazooie*-esque *Yooka-Laylee*.

"I purposefully try not to look at other people's products because I don't want to be steered from the direction I'm taking," he says.

So what direction is the veteran games developer taking?

"Well, I can't tell you that yet, but you're going to find out hopefully by the end of the year."

Still so secretive. The enigmatic nature of the Stamper brothers is part of the reason they have become such revered figureheads. They are as famous for keeping their cards close to their chests as they are for the incredible games they have created. But why the need for such secrecy?

"It's not secretive, exactly," Stamper explains. "We have a goal to produce the very best product we can, and that takes all of our time. A day spent doing an interview somewhere is a day that's not spent on development and design – and that really bothers me.

"I've done this my whole life, I'm still doing it now. My time is very valuable to me. Yes, coming to events and doing interviews is wonderful, but what about those ideas that I would have developed if I had stayed at work and carried on pushing in the direction I need to push?"

But no matter what direction the Stampers try to push, they will always be known for their time at Rare and Ultimate Play The Game. Arguably two of the most influential UK developers in our industry's history, the pair can be cited as the direct inspiration for many of today's games creators.

A humble man, Tim acknowledges this and urges new and upcoming developers to continue stretching the limits of what we consider to be a video game.

"I hope our studios had a dramatic impact on people's thinking about the sort of software you can write," he says.

"I want to continue that trend. Software's a wonderful, wonderful thing – games in particular – and I hope people keep pushing the boundaries, and you can be sure I'll be doing the same. When you look at my product, I want you to be surprised and delighted." ■

A PIRATE'S LIFE

Taking to the stage to collect the award, Tim Stamper opted for a more creative approach to the customary thank you speech. Below is the poem he composed and read to attendees on the night, perhaps hinting at the Stampers' forthcoming return:

When I was younger, my Dad said to me –
What will you be? I must have been three,
I could have been more, I would have been four.
A Pirate's life for me!
So when I grew up, I remembered our chat,
I bought me some boots and a silly black hat,
A long floppy coat, a dog and a boat.
The Golden Girl is she!

The rain tortured down and shredded the sails
And masts tumbling over, were lost in the gales
So, I mustered a crew that nothing could frighten
And sailed the seas from the Indies to Brighton!
We battled the pirates and sharks we were hating
And skirted around the ships that were waiting
To shoot us with cannons and musket and shot
Until they clapped eyes on the weapons we'd got!

Came on a warm isle, we dug a huge hole
And into it poured all the treasures untold
On parchment, in ink, I drew a great map
The crew kept one half and gave one half back!
But the booty was safe, on the half that I'd got
The name of the island and X marks the spot!

The time is approaching to show you the wonder
Of beauties and monsters and treasure and plunder
The places I've been and the worlds that I've seen.
A Pirate's life for me!

unity

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Hundreds of companies attended this year's Develop Awards in Brighton to honour the best games development talent the UK and Europe has to offer

HUNDREDS OF DEVELOPERS and games industry professionals descended upon Brighton in July for the 2015 Develop Industry Execellence Awards.

There were more than170 companies in the room, all keen to see who this year's winners would be, as well as honour our 2015 Development Legends, Tim and Chris Stamper.

Creative Assembly's *Alien: Isolation* was the big winner on the night, picking up two awards – Use of a Licence or IP and Audio Accomplishment – for the studio, as well as Creative Outsourcer: Audio for specialist agency Side.

Close behind was French studio Dontnod Entertainment, which took home the awards for New IP – PC/Console and Use of Narrative.

Other winners included Unity Technologies, Rockstar North, State of Play Games, Roll7, Oculus VR, Space Ape Games, Audiomotion, and Publishing Hero champion Team17.

Read on for the full list of winners, highlights from the night, and quotes and reactions from this year's victors.

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NEW GAMES IP – PC/CONSOLE

Life is Strange – Dontnod Entertainment

> *Thank you everyone. We're amazed to win this prize. It has been such a great adventure to work on this game.*
>
> Michel Koch, Dontnod Entertainment

NEW GAMES IP – MOBILE

Midoki – Plunder Pirates

> *We're both really proud to be here. Thanks to the team, Rovio Stars and our chairman Ian Livingstone.*
>
> Chris Gage, Midoki

USE OF A LICENCE OR IP, PRESENTED BY ICONICFUTURE

Alien: Isolation – Creative Assembly

> *I'd like to thank our team for taking risks. Making good games isn't easy; making great games is bloody hard.*
>
> Al Hope, Creative Assembly

VISUAL ARTS

Lumino City – State of Play Games

> *Lumino City is a really special project: blood, sweat and tears went into it. We worked with some amazing talent.*
>
> Katherine Bidwell, State of Play Games

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AUDIO ACCOMPLISHMENT

Alien: Isolation – Creative Assembly

> *On behalf of all the audio department, thanks to everyone on the team for giving us a great game to put audio to.*
>
> Byron Bullock, Creative Assembly

USE OF NARRATIVE

Life is Strange – Dontnod Entertainment

> *We really want to thank our writers, the game designers and everyone who helped make this game what it is.*
>
> Raoul Barbet, Dontnod Entertainment

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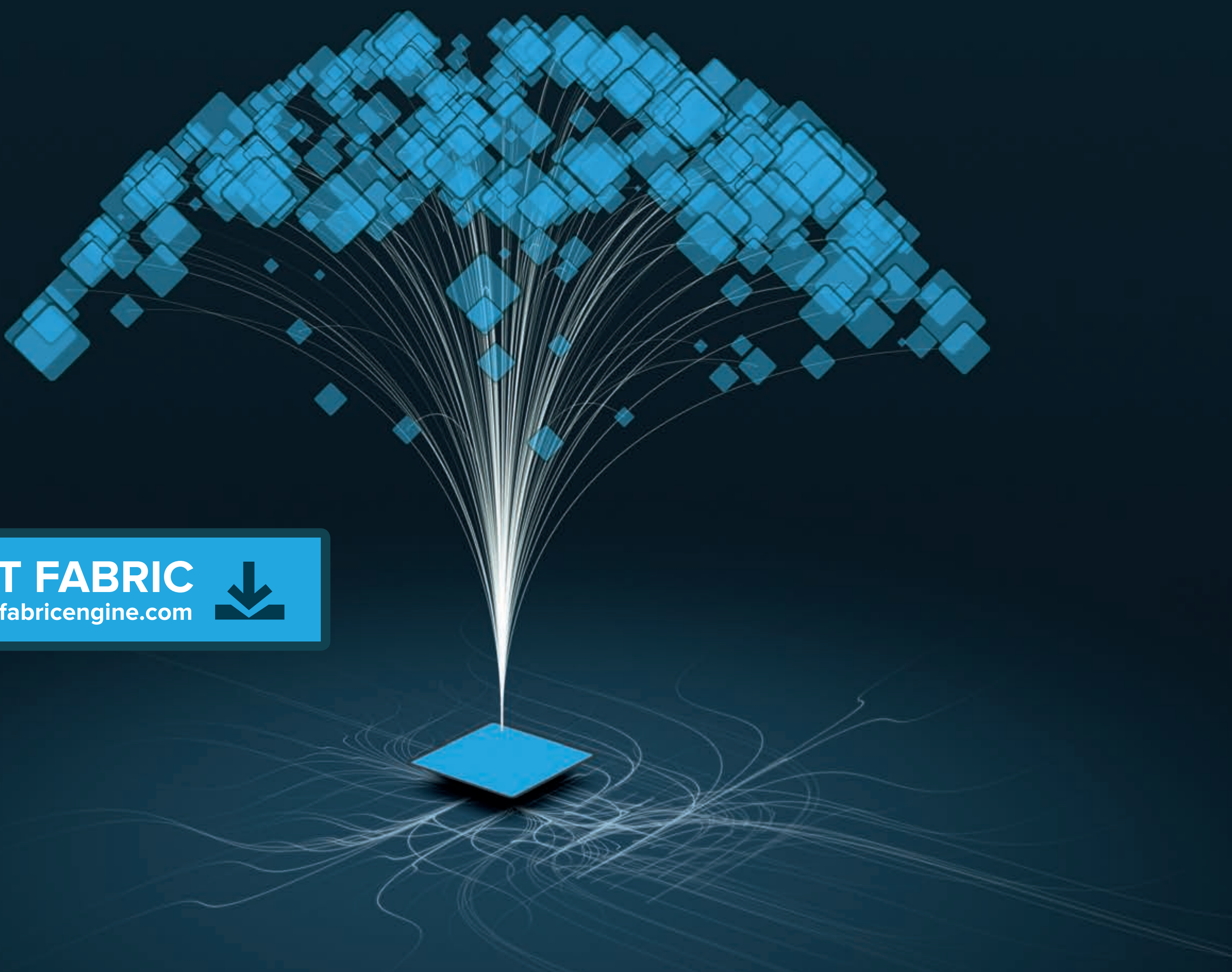
Oculus VR

> *It's very kind to be up for this award again – even though we haven't shipped a product yet.*
>
> Simon Green, Oculus

DESIGN & CREATIVITY TOOL

SpeedTree for Games – SpeedTree

> *I'm very honoured to accept this for the team. It takes an enormous amount of people to put SpeedTree together.*
>
> Michael Sechrest, Speedtree



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> *It's a real honour to win this award two years in a row. To all our customers: you make Perforce what it is today.*
>
> Tulin Green, Perforce

ENGINE

Unity 5 – Unity Technologies

> *We thank Develop, we thank all the studios using Unity and a special thank you to [Unity's] Dr. Graham Dunnett.*
>
> Antony Douglas, Unity Technologies

SERVICES

Audiomotion

> *This is a very special night, and means a hell of a lot to us. Thank you very much.*
>
> Mick Morris, Audiomotion

QA & LOCALISATION

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Testology

> *There was stiff competition this year. There's some amazing companies out there, so it's getting harder to win this.*
>
> Andy Robson, Testology

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CREATIVE OUTSOURCER – VISUAL & DEVELOPMENT

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Speech Graphics – Middle-Earth: Shadow of Mordor

> *Thank you to Warner Bros. Games and Monolith for giving us such a fantastic project to be a part of.*
>
> Traci Tufte, Speech Graphics

CREATIVE OUTSOURCER – AUDIO

SIDE – Alien: Isolation

> *Thank you to Al Hope and all the team at Creative Assembly for trusting us. It was an incredible project to work on.*
>
> Andy Emery, Side

RECRUITER

Amiqus

> *Massive thanks to our wonderful team and to our clients who mean the world to us. We're so proud and happy.*
>
> Liz Prince, Amiqus

PUBLISHING HERO

Team17

> *We work with some amazing studios around the world. It's tiring and hard work but it's incredibly rewarding.*
>
> Debbie Bestwick, Team17

MICRO STUDIO, PRESENTED BY UNITY

Roll7

> *Thank you to Sony and Devolver, all the wonderful people we work with, as well as all the people who support us.*
>
> John Ribbins, Roll7

INDEPENDENT STUDIO

Space Ape Games

> *We are the future. Maybe you haven't heard of us yet? Shame on you! You will hear about us, and play our games.*
>
> Vicki Wong, Space Ape Games

IN-HOUSE STUDIO

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Rockstar North

NEW STUDIO

Starship

> *This really means a lot to us. It's hard to be a start-up, so it's great to see so many viable new firms out there.*
>
> Clemens Wangerin, Starship

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DEVELOPMENT LEGEND

Tim and Chris Stamper

> ***We've worked with a lot of talented guys and girls in the thirty-something years we've been producing games. It's been absolutely wonderful. It's difficult to thank everyone we've worked with, but Chris and I thank you for this award.***
>
> Tim Stamper, FortuneFish

THE JUDGING PANEL

JUST UNDER 70 games industry experts voted on this year's nominees. *Develop* is very grateful for their support.

AJ Grand-Scrutton, Dlala Studios
Alex Bertie, Marmalade Technologies
Alex Ward, Three Fields Entertainment
Alex Wiltshire, Hello Games
Alexandru Voica, Imagination Technologies
Alice Taylor, MakieLab
Andrew Day, Keywords International
Andrew Oliver, Radiant Worlds
Andrew Webber, Microsoft
Andy Brammell, Unity Technologies
Andy Emery, Side
Andy Payne, Mastertronic
Barry Meade, Fireproof Games
Ben Parfitt, MCV
Ben Wibberly, VMC
Charlie Czerkawski, Guerilla Tea
Chris Clarke, Plan of Attack/Unity
Chris Dring, MCV
Chris Kingsley, Rebellion
Craig Chapple, Develop
Dana Cowley, Epic Games
Darran Garnham, Mind Candy
Dave Cullinane, Realtime UK
Dave Ranyard, SCE London Studio
David Banner, Wales Interactive
Debbie Bestwick, Team17
Ed Valiente, Nintendo of Europe
Ella Romanos, Strike Gamelabs
Emma Smith, Creative Assembly
Fabio Lo Zito, InnoGames
Gareth Edwards, Thumbstar
Gavin Price, Playtonic Games
Graham McAllister, Player Research
Guillaume de Fondaumiere, Quantic Dream
James Batchelor, Develop
James Brooksby, Edge Case Games
Jamie Sefton, Game Republic
Jason Della Rocca, Execution Labs
Jason Kingsley, Rebellion
Jo Twist, UKIE
John Broomhall, Game Music Connect
Joost van Dreunen, SuperData Research
Liz Prince, Amiqus
Luke Dicken, Zynga
Martin MacMillan, Pollen VC
Michael Souto, LocalizeDirect
Mick Morris, Audiomotion
Miles Jacobson, Sports Interactive
Natalie Griffith, Press Space
Nick Baynes, Gunjin Games
Nick Button-Brown, Improbable
Noirin Carmody, Revolution
Oscar Clark, Unity/Stormlantern
Patrick O'Luanaigh, nDreams
Paul Farley, Tag Games
Peter Lovell, NaturalMotion
Rami Ismail, Vlambeer
Rick Vanner, The Game Creators
Rob O'Farrell, Dovetail Games
Robert Troughton, Epic Games UK
Rod Cousins, Jagex
Shahid Ahmad, SCEE Strategic Content
Simon Barratt, Barog Game Labs
Simon Hade, Space Ape Games
TJ Galda, Autodesk
Tony Liviabella, SN System
Trevor Williams, Playground Games
Tulin Green, Perforce
Will Freeman, Develop

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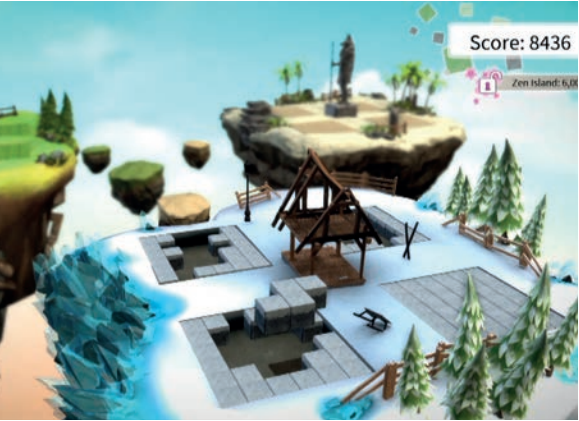
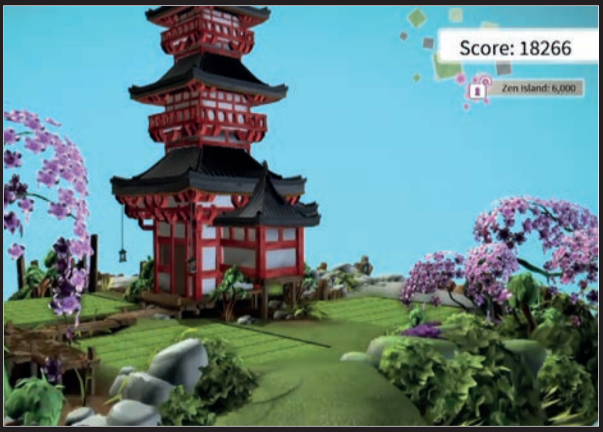
INTERACTIVE

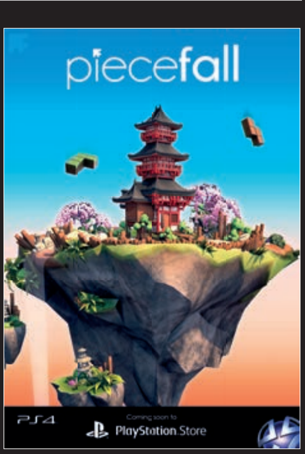
First Class: The power of PieceFall

How does a young team of technical whiz kids end up creating a beautiful-looking puzzle game for PS4, and why are they so pleased that they have lost all their development staff?





PlayStation First



SHEFFIELD HAS BEEN home to its fair share of veteran game studios over the years, but studios don't come much younger and fresher than the Steel Minions.

The Steel City that inspired the studio's name might have given birth to the ninja alien Zool, but these guys weren't even old enough to hold a joystick back then. In fact, the developers are all students on Sheffield Hallam University's games degrees and they don't graduate until November this year. That makes them the first undergraduate development team in the world to publish their own PlayStation 4 game, and they're pretty pleased about that too.

"It's been amazing to realise our concept on PS4, but to achieve a world first at the same time is unbelievable," said game designer Wesley Arthur.

PieceFall is an agile, rhythmic block-placing 3D puzzle game in a world of abstract floating islands. It will have immediate appeal for *Tetris* fans, but provides a pleasingly new take on the classic concept by flipping the puzzle onto a horizontal plane. The tranquil nature of the environments have been a fundamental aspect of the game's design, with the music and audio all carefully crafted to ease you into a state of puzzle-playing Zen. Collect enough points and the ultimate level of the Zen Island is unlocked.

But Arthur says it hasn't been a quick or easy journey for the young developers: "I came up with the original game concept as part of a group project in October 2013. It took three different teams, ten months of development over two years in order to finally bring it to market."

> ***"It's been amazing to be able to realise our concept on PS4, but to achieve a world first at the same time is unbelievable."***
>
> Wesley Arthur, Steel Minions

Programmer Steve Hartin adds: "The game is written completely in C++ using the PhyreEngine. There's no doubt we could have created it more quickly in other engines, but we wouldn't have learned as much from the experience."

Like all games, *PieceFall* went through various iterations and game changes where complex mini-games, extra bonus levels, multiplayer objectives and additional islands had to be sacrificed to get the game over the finish line.

And learning is what it is all about, according to the Steel Minions' studio manager Jake Habgood: "University is a lot like a gym. The harder you push yourself the fitter you become at the end of it. If you can write and publish a PlayStation 4 game using C++ then you're well placed to face any industry challenge".

Who can argue with that when all five members of the final team who took the game to market already have jobs at Sumo Digital in Sheffield and Elite3D in Valencia?

"Steel Minions is probably the only games studio in the world that actively encourages other studios to poach its staff," Habgood expounds.

"*PieceFall*'s original programmer got taken on by Sumo last year, and we're always having to adjust our development schedules to accommodate our best staff getting placements in the industry, which is great."

The Steel Minions team benefitted from a dedicated producer from Sony's XDev Studios in the form of head of PlayStationFirst Maria Stukoff, who took the team through a tough development cycle to get a well-polished game to market.

"This is what we have been working towards, getting the next wave of PlayStation developers to create games and to publish," said Stukoff.

"It's been brilliant to work alongside such a talented team of students to achieve something so worthwhile to their careers".

PieceFall is available on the PlayStation Store and it is well worth the 99p price tag to bring a bit of Zen into your life this summer. ■

For more on PlayStationFirst , visit ***develop.scee.net/academic/playstation-first****. Steel Minions can be found at* ***www.steelminions.com****, while you can learn more about Sheffield Hallam at* ***www.shu.ac.uk****.*

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His Story

Following the runaway success of his first indie release Her Story, Sam Barlow discusses why he left triple-A to develop on his unique vision for the game

Sam Barlow (above) left the relative comforts of studio life at Climax last year to go indie and get to work on his own game, the now hugely successful Her Story

NARRATIVE-DRIVEN GAME *Her Story* is the latest indie sensation to hit PC and mobile. The title tells the tale of a murder through a series of short clips from an interview with the prime suspect in the case.

By punching in a series of keywords into the police database, players slowly uncover a layered story where the plot is not as simple as it may seem. It's an idea that has caught the imagination of thousands of consumers since its release just over a month ago.

The game was created by Sam Barlow, who previously worked on games such as *Silent Hill: Shattered Dimensions* at Climax Studios. He left the triple-A space over a year ago after deciding to test his skills in the indie arena. He gave himself a year to develop his first game. This didn't mean he was going to rush into any old game, however.

"I didn't want to get started on it until I had an idea that felt like I was going to be able to execute on it," says Barlow. "I could probably quite easily have gone and made an exploration horror game in Unity and gone 'hey, people who liked my *Silent Hill* games, get this'. But I kind of knew that there would be big compromises there because of budget.

"So I didn't really want to make a game that would feel like, if Sam had had another few million this would be a better game. I really like studios like Simogo. You play their games and you can't really imagine a better version. It doesn't feel like they've aimed to make something cheap, it's like that's just an idea that works and on that scale."

Barlow says he had already come up with the idea of a police procedural game before leaving triple-A. Despite its popularity in TV and fiction, it's something rarely seen in games – bar rare examples such as *L.A. Noire* and the *Phoenix Wright Ace Attorney* series. And it's something publishers aren't interested in.

> ***"I didn't want to make a game that would feel like if I had another few million it would be better."***
>
> Sam Barlow

"I think there's probably a kind of acknowledgement that this genre derives so much from character interactions, from people's psychology in these everyday settings, and that stuff we kind of know is harder to do in games," he says. "So there's always been that reluctance.

"I felt like if I'm doing this indie thing, I should be doing something that I couldn't do with publishers paying for it, and I always wanted to do something in the crime fiction space."

CRACKING THE CASE

The idea for *Her Story* was inspired by '90s cop show *Homicide: Life on the Street*, which Barlow says embellished on the idea of the interview with the prime suspect being a gladiatorial arena for detectives.

Barlow says that by focusing on this idea, he felt like he was being a "clever indie" – excluding all the fat and narrowing the game's scope to something manageable.

"But at the same time I'm focusing on this intimate setting, dialogue and character interaction stuff," he explains. "And that's the stuff that normally gets skipped by the bigger budget games. So I thought, this is something that I can actually have an interesting take on, I can have something people haven't seen before.

"But at that point I didn't necessarily know what the game was."

Barlow was keen to make a procedural cop game with a focus on the interviews. He also wanted to work with an actor, having enjoyed this process during his time at Climax – but needed to find a way to do it with a fraction of the budget. He then settled on writing a series of video interviews in chronological order, which would then be broken up into small clips, searchable by keywords.

"I thought cool, my brain is excited by this," he says. "I like the structure, it feels interesting and at the same time it has an angle where despite it being quite an experimental storytelling thing, it also has an angle where it's quite understandable."

To make this possible, Barlow put the entire script into a flow chart. The idea was that certain words would unlock new videos, slowly allowing the player to uncover the true events of what happened in *Her Story*.

The idea was tested on pre-existing, real-life interview transcripts between detectives and their suspects. Here he cut the text into small chunks and then searched for key terms to consume the story out of order.

TRUE CRIME

"Despite the fact this hadn't been scripted at all, it was just real stuff, it was actually really enjoyable to do that," he says. "I found there were themes coming to the surface. In one case in particular was this teenager who murdered his parents in America. And he was this kind of brilliant sociopath. He didn't really give anything away, he was pretty cool and collected. He didn't trip up over his alibis.

"But playing it with this database you found quickly that words like money and cash kept cropping up."

He adds: "It kind of felt exciting, it felt slightly magical to me. This is a feeling I haven't had before in a game. I feel like, despite the fact this is this static transcript I'm working from, it did feel a little bit like I was investigating and picking up threads. And this sensation of being able to pull out packaged up clips that were united by themes or ideas, but weren't in any way intended to sit together, just felt really fresh and interesting."

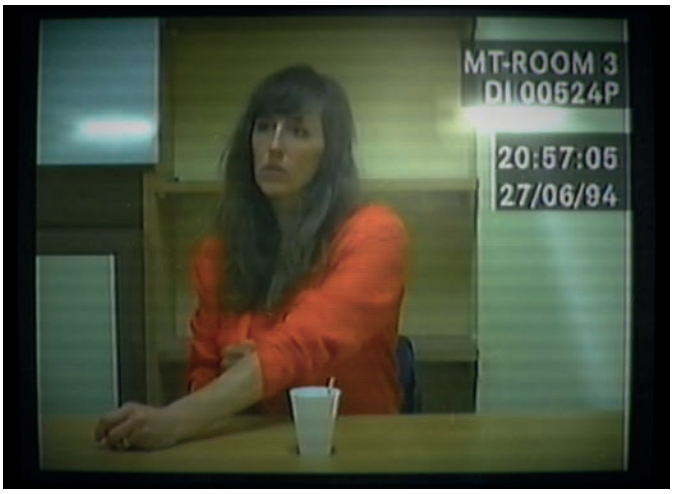
Now the concept was proven, at least to Barlow, he made sure his script contained sufficient layers of intrigue to keep players searching to discover the full story. This included biographies, how each event unfolded and the agenda of both the main character, played by actress Viva Seifert, and the detectives investigating the murder.

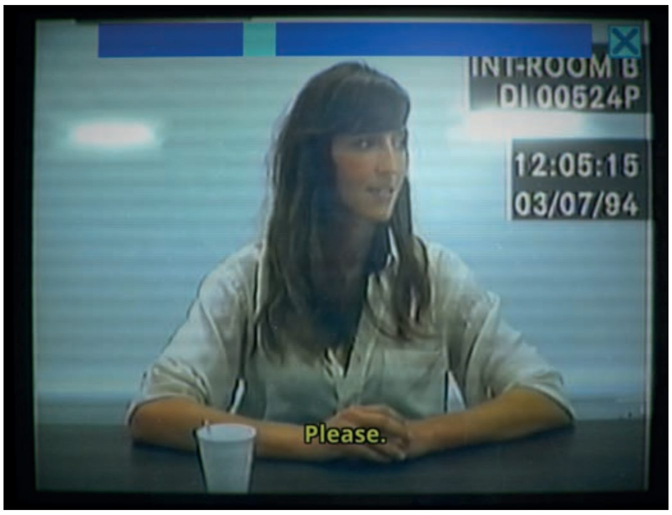
Once that script was written, Barlow says it was actually easy to put the game together.

"For me it was quite an easy process because the computer is just there telling me this clip doesn't really work because it's using this word that's used a lot," he explains. "So I'd go in and give it a different word that meant the same thing."

Following successful testing of the game, Barlow eventually released *Her Story* in June to huge success. Though describing the game as an experiment – one that he's proven can work – he isn't sure if he'll return to a similar type of game in future.

"I need to get excited by having an idea that feels quite different or something that requires me to figure out how to make it work," he says. "So I think it would probably be the wrong thing to do that." ■





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Frankfurt in focus

As the creative industry continues to grow in Frankfurt, **Craig Chapple** asks those running the games studios in the city what makes it an ideal location for development

Crytek MD Avni Yerli (top) says Frankfurt's location at the heart of Europe makes the city an ideal spot for setting up a studio. Foundry42's Brian Chambers (bottom) meanwhile set up shop in the region after a spate of applications from talented local developers

All Frankfurt image credits: ©Tourismus+Congress GmbH Frankfurt am Main

COMPARED TO SOME of its neighbours, Frankfurt could be considered a small city. Its population of 708,543 is dwarfed by that of Berlin and Hamburg. But the city is home to a bustling and growing games development hub that can rival local and international development hotspots.

One of Germany's most famous games companies, Crytek, moved its main office to the region in 2006, a decision company co-founder and MD Avni Yerli says it hasn't regretted since. It's also home to companies like Keen Games, Deck 13 and now Foundry42, the latter working on the mammoth crowdfunding project *Star Citizen*.

But why open up a business in Frankfurt? Yerli says that it's an international city with a good infrastructure already in place, crucial for a globally operating company like Crytek.

CENTRE OF EUROPE

"The airport is one of the biggest in Europe and the internet bandwidth in the area is perfect for our needs," says Yerli. "About 40 per cent of the people living in Frankfurt have a foreign passport and that makes for a very multicultural city with more than 180 nationalities."

Deck 13 co-owner and creative director Jan Klose says its position in the centre of Europe means it can reach almost any capital in the world without a stopover – crucial for hiring foreign talent and for relationships with international partners like publishers and outsourcers.

"We can take a plane to Paris in the morning for a publisher meeting and be back in Frankfurt in the evening," he says. "Or we can go to China to do a workshop with a new outsourcer setting up a new graphics pipeline.

"Also, Frankfurt is a city with a very high living standard. The city is very green, traffic is not close to collapsing, and there's great offerings for food and entertainment. These are good working conditions for any company, but it's also great to attract talent from the games industry."

> ***"On a national level, Frankfurt's education system for game developers is one of the best."***
>
> Avni Yerli, Crytek

Foundry42 Frankfurt's development director Brian Chambers, meanwhile, says the decision to set up in Frankfurt was an organic process after the company began receiving resumés from qualified candidates who live in and around the area.

"After looking through the CVs and speaking with them we realised that a majority of them preferred to stay in the Frankfurt area and not relocate," he explains. "We initially rented a small space for people to work, which was a good temporary solution, and the resumés kept coming in from local talent.

"At a certain point we realised that we truly had enough interest in Frankfurt to have a full team out here as an extension of our Foundry42 studio in Manchester, and the game would benefit from their collective expertise."

Being a small city has helped spur on a culture of a tight-knit community where knowledge and even resources are shared between studios. Of course, this is often said about dev hubs, but Deck 13's Klose admits it was not always like this in the past.

"Having some renowned development companies around, there was a strong sense of competition in the past – until we realised how big the global developer market outside of Frankfurt really is, and at that point we started to work together on different levels," he explains.

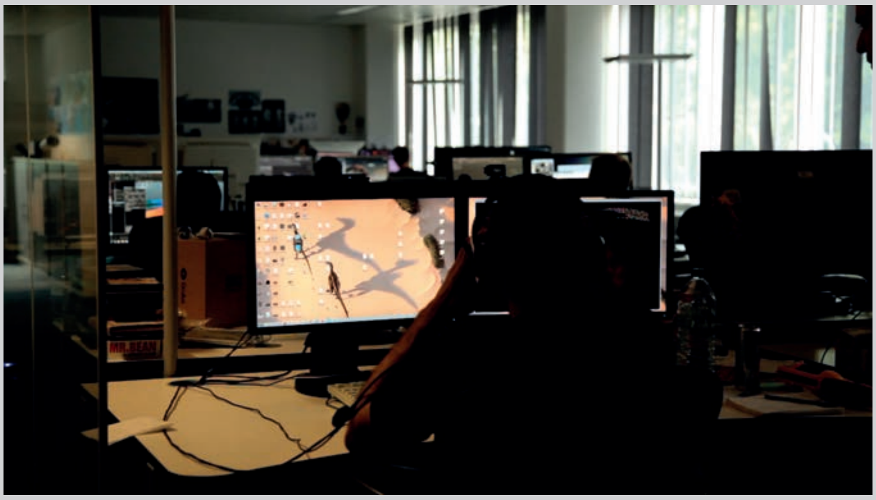
"We do have initiatives like Gamearea Frankfurt where the companies are organised, but also we're calling each other on the phone when there's an issue with resources or business opportunities."

One of Deck 13's key upcoming initiatives to spread the idea of collaboration is a new developer YouTube channel called DevPlay. Here, it hopes to have different studios do PR and videos together in a bid to increase exposure.

A key challenge facing any would-be games development hub is the state of local education and the talent coming through it. Local institutions in Frankfurt include The

CRYTEK REBORN

Company: Crytek
Number of employees: 330
Vacancies in: Art, animation, programming, engineering, marketing, design
Website: www.crytek.com/career/offers/overview/frankfurt



CRYTEK IS ONE of Frankfurt and Germany's most famous companies. It's known for building hit triple-A games such as the *Crysis* series and *Warface*, and is currently working on MOBA *Arena of Fate*, co-op shooter *Hunt: Horrors of the Gilded Age* and a new virtual reality game entitled *Robinson: The Journey*.

The company had widely reported problems last year that resulted in financial difficulties and ultimately the closure of Crytek UK in Nottingham. The firm has since recovered however, and managed to secure a huge licensing deal with an as yet unknown company.

Speaking to *Develop* at GDC earlier this year, Crytek co-founder Faruk Yerli said the owners have learned their lessons, and moving forward will make bets based more towards the company's strengths.

"We have a good strategy for 2015 and 2016," he said. "There are two pillars: one is CryEngine, and one's our pipeline of games, which are already announced. So these are both the areas we are focusing on right now."

The Frankfurt studio now has openings for some 44 positions at the time of writing, as well as the 330 staff it already employs, who will get the chance to work on its upcoming roster of titles for platforms including console, PC and even virtual reality.

It's the latter hardware that Crytek is committed to becoming a key player in, both as a creator of innovative VR experiences and as a tech provider for other developers. Unlike other large companies, the studio is giving its full backing to the technology, which according to SuperData is anticipated to reach 10.8m people in 2016.

"There is a strong sense that VR is a territory tailor-made for the specific strengths of Crytek and CryEngine, and that we are on the right track to establish ourselves as a VR innovator and market leader in both the short and long-term," says Crytek co-founder and MD Avni Yerli.

"VR is dramatically altering the way developers think and will be the gateway to amazing innovations. Games are still going to exist, but all of a sudden you have a whole new dimension to them that changes the quality of the experience in a significant way."

Games Academy, the SAE Institute and the University in Darmstadt. But it's also key to note its creative and IT industries employ more than 54,000 people between them in the city of Frankfurt alone, providing a base for more experienced talent as well.

NURTURING TALENT

"Compared to other cities in Germany, Frankfurt is very good at fostering new talent in the industry," says Yerli. "The Games Academy, the SAE Institute and the University in Darmstadt have excellent education programmes, which give us the opportunity to pick specialists from a pool of young and well-trained graduates.

"Of course, there is always room for improvement, but on a national level Frankfurt's education system for game developers is one of the best."

Foundry42's Chambers adds that although there are educational institutions on its doorstep, there are a number of courses run across Germany that also benefit Frankfurt. And it's something the studio is keen to take advantage of.

"We have worked with local universities in Germany well before we set up our office here – for example, the Cologne Game Lab worked with us on our The Next Great Starship programme, where our community competed to create starships to include in *Star Citizen*," he states.

"There are a number of specialist university courses established for games development across Germany and the level of education in art and coding is also very high. Graduate recruiting is something we will do more in future as we grow as we have seen it succeed – in fact, most of our current team started out as interns at their first games job."

Klose says that while the talent situation is good, given the high density of relevant industries and good universities in Germany, there are still challenges that remain when it comes to recruitment.

"We need a lot of specialists who are hard to find, and therefore we need to search globally for new talent," he says. "At least it's easy to persuade them to move to Frankfurt."

A QUESTION OF FUNDING

Though Frankfurt's studios are able to realise the benefits of the city's location, an international airport and a sound education system, there are a number of challenges developers face in the region. Not least of those are the lack of funding initiatives and tax incentives compared to other countries.

"Games developers in Germany don't get as much support from the government as developers in neighbouring countries, which makes it harder to stay ahead of the international competition," states Yerli.

"In Great Britain or France research and production efforts are partly subsidised, whereas in Germany it is very hard to qualify for any financial support from the government. Economical development programmes for technology research that is suited for the games industry needs should also be established in Germany."

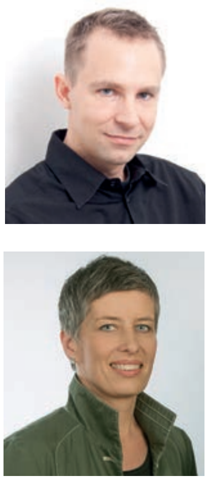
Christian Hoppenstedt, lawyer at Hoppenstedt Rechtsanwälte, says the lack of tax breaks is a problem for Germany, and believes their introduction would be beneficial for the games industry as a whole.

"Tax breaks like the German Federal Film Fund (DFFF), where a film producer can obtain a grant of up to 20 per cent of the approved costs from DFFF if they spend at least 25 per cent of the production budget in Germany, are not available for game developers," he explains. "A programme like DFFF for games would definitely improve Germany as a location for the video games industry – not only for German developers."

Klose says while Frankfurt has its benefits, it isn't like Montreal in Canada, and it's more known for its banks and internet providers than for games development and a broad creative industry.

"It's getting stronger every year but there is still a long way to go," he says. "It wouldn't hurt getting some more big names over here."

Frankfurt Economic Development's centre of creative industries wants to change this perception however, and seeks to drive sustainability and help companies find the right funding opportunities for them (*See pg.36*), but the lack of comparative government support to other countries is still a concern for many, particularly new and smaller studios.



Top to bottom: Deck 13 creative director Jan Klose and Manuela Schiffner, director of Frankfurt Economic Development's centre of creative industries

"There is definitely room for improvement," states Yerli. "More people need to understand how much potential for innovation is embedded in the games industry and how its research can benefit other industries. Other countries are ahead of us in this regard and have appropriate programmes already in place.

"In Germany on the other hand, smaller or newly-founded games studios struggle, because they have to fund almost everything themselves. This can discourage devs from exploring new tech or making innovative decisions, because they can't take the risk of potential failure."

Klose echoes these sentiments, and believes the government needs to do a lot more to encourage growth and provide more funding support. He wants to see the games industry take on a higher importance by those in power, which will only occur from a shift in culture.

"Funding is a crucial issue and there is not near enough happening to enable a solid basis," he says. "From time to time there are certain specialised funding opportunities in Frankfurt and in the Frankfurt Rhine-Main area. But I think we need a major mind shift in politics and culture to make people understand the importance of games development and its cultural value. Only then will we see more government incentives supporting and building up our industry."

WIDE-RANGING BENEFITS

But these issues haven't stopped Foundry42 setting up shop in the city. Chambers admits that, unlike the UK, Germany as a whole lags behind in its support for the games industry, but is hopeful of a better future.

"We hope that the local state and the German Federal legislators will soon

LORDS OF FRANKFURT

Company: Deck 13
Number of employees: 50
Vacancies in: Programming, 2D / 3D Art, Design, VFX, Engineers
Website: http://www.deck13.de/jobs/

DECK 13 WAS founded nearly 15 years ago in 2001 and has offices based in Frankfurt and Hamburg, and was recently named Studio of the Year at the German Developer Awards 2014. Employing 50 staff in the Frankfurt studio, the company has worked on titles such as *Venetica*, *TransOcean* (Hamburg) and most recently action RPG *Lords of the Fallen*.

The company is a staunch believer in developing increasingly bigger titles for console and PC, despite recognising the challenges and financial risks of such an endeavour, particularly as development costs and expectations rise with new, more powerful hardware. But the studio is bullish on the talent of its employees and its future.

"We are confident that our next game will show that we've learned from our past mistakes and that we can deliver an even greater experience," says Deck 13 co-founder and creative director Jan Klose.

To this end, the studio has signed a deal with publisher Focus Home Interactive to develop a new RPG set in a dystopian sci-fi future, the name of which will be revealed at a later date. The game will be released on PS4, Xbox One and PC.

As well as continuing its own ambitious games development plans; Deck 13 is now also entering the publishing business. It recently became an official Xbox publisher and is inviting indie developers to become partners. Klose says that the company made the decision after seeing a variety of "wonderful games" on the market that are lacking visibility, sales opportunities and the right contacts.

"We want to become the partner of the studios creating these games, allowing them to do what they can do best: creating games," says Klose. "We offer almost everything a traditional publisher offers – however, mostly without the financing aspect.

"This makes the developers keep their intellectual property, earn the major share of the sales and stay independent. We try to complement their team. We can market and distribute their games and even help them finish them in terms of producing and resources.

"And finally, we can advise them so that they don't need to repeat all the mistakes we made. All-in-all, we want to be those who make their games happen, while they stay independent."

recognise the benefits of increased growth in this area and start offering local incentives," he says.

It's a testament to Frankfurt's growing recognition and attraction to big name studios like Cloud Imperium that issues with funding and tax incentives have not stopped such big companies from being based in the city.

Chambers, formerly of Crytek, is buoyant about Frankfurt's opportunities in the present and future. He says that many of the challenges the city faces aren't that different to those encountered be any other European city. Like many others, he again goes back to the city's impressive talent pool.

"We're currently getting a steady stream of experienced candidates applying, so we can assume healthy growth of our team," he says. "Frankfurt is generally a great place to both work and live. It typically rates in the top ten cities to live in the world."

Manuela Schiffner, director for the centre of creative industries, part of Frankfurt Economic Development, also agrees that the challenges Frankfurt faces are similar to those encountered by other technology hubs across the world.

"In our opinion the main challenges are getting the products into the market and optimising and securing the financing structure of the company," she says.

Despite some obvious challenges, Frankfurt has key factors going for it that have made it an ideal location for games studios, both founded locally and from international firms. Its hotbed for talented developers and technology and games companies, bright education system and ideal location in Europe are gradually making Frankfurt one of Europe's key games development hubs. ■

LAW AND ORDER

Image credit: Michael Erhart

Company: Hoppenstedt Rechtsanwälte
Website: www.contentlaw.de

OFTEN FORGOTTEN BY many developers who'd rather focus on the creation of games rather than the business side of things, looking after legal matters can be hugely important. These needs can stem from running a business, opening an office and hiring new staff, to protecting your IP from copycats.

One firm offering such legal services in Frankfurt is Hoppenstedt Rechtsanwälte. It specialises in providing legal services to enterprises and professionals in all areas of the creative industries.

Christian Hoppenstedt, who specialises in copyright and media law, says the services it offers to games studios in particular are main directed at the protection and exploitation of intellectual property. This includes trademarks, ideas and products. As the market has shown, particularly on the mobile App Stores, clones can often appear on the back of a runaway success, where game likeness and even the name can be copied.

The legal firm also offers up other services to developers as well, which help with the running of everyday business, particularly at studios that employ staff.

"We draft, review and negotiate for instance contracts regarding the development and distribution of games," says Hoppenstedt. "Furthermore we advise our clients with all issues regarding related areas of law as, for instance, labour law and company law."

A STAR NEW STUDIO

FOUNDRY
I S D
3000

Company: Foundry42
Number of Employees: 22
Vacancies: Animation, Art, Design, Programming, QA
Website: www.cloudimperiumgames.com/jobs

AT THE BEGINNING of July, Cloud Imperium Games opened a new development office in Frankfurt, Germany, managed by Foundry42 in Manchester. The studio currently employs 22 staff and is run by development director Brian Chambers. It houses a number of former Crytek staff who have experience using the technology powering Star Citizen, CryEngine.

It's founding came after Cloud Imperium received numerous resumes from talented developers in the city, which led to the company eventually founding a full development studio in the region.

The studio aims to grow to approximately 50 staff during the next five months, though the size of the team beyond that will depend on the needs of the game and the talent that applies. The team will work on creating *Star Citizen*'s single-player story mode, *Squadron 42*, and the core tech connected to it.

"The Frankfurt office has a strong focus on technology, design, and cinematics, but ultimately has people filling roles across all standard disciplines within the games industry," says Chambers. "We work closely with the other teams at CIG's various studios, collaborating on ideas and co-owning features and tasks. Almost every member of the Frankfurt team has daily video calls with people from the various other studios. It's a very collaborative process."

Developing Frankfurt

Frankfurt Economic Development's centre of creative industries tells **Craig Chapple** how it's helping to establish the region as one of Germany's most vibrant games clusters

Manuela Schiffner is the director of Frankfurt Economic Development's centre of creative industries, which supports the growth of new and existing businesses in the region

All Frankfurt image credits: ©Tourismus+Congress GmbH Frankfurt am Main

THE SOFTWARE AND games sector within the creative industries is recognised as one of the strongest markets in Frankfurt.

The city counts 7,800 employees in this area, and between 2007 and 2014 the number of jobs offered in these sectors increased by some 47 per cent. In total, the creative industry employs 25,065 professionals, while IT accounts for 29,267 jobs in 4,059 different companies.

The software and games sector is said to have represented 19 per cent of the total turnover of Germany's creative industries.

"Frankfurt has exploded over the past several years and has established itself as an important games industry hub within Germany," says Manuela Schiffner, director of Frankfurt Economic Development's centre of creative industries, an agency that works to strengthen the city's economic future by creating the ideal business climate for growth.

"We have one of the most vibrant and important games clusters – no other region offers such a distinguished concentration of games developers, games development related companies, publishers, producers, R&D and universities.

"The Frankfurt metropolitan area has the perfect ecosystem for harnessing digital potential – namely a strong creative workforce, thriving research and educational support, solid industry infrastructure, an international art scene – all-in-all a great environment for further growth and development and a great place to live."

SPURRING GROWTH

Frankfurt Economic Development wants to spur this growth even further. It plans to obtain its ambitions of a prosperous region by providing support for local business, new investment and global trade. It also aims to focus on people by attracting talent from the local area, neighbours or other countries, and ensuring such skilled professionals are retained.

> ***"Frankfurt has exploded over the past several years and has established itself as an industry hub."***
>
> Manuela Schiffner, FED

The agency is a full subsidiary of the Frankfurt am Main, and acts as an intermediary between business and politics, ensuring industry needs are heard by the decision makers. It offers advice to firms in the region on areas such as business, site-planning and economic developments in Frankfurt, and devises what it calls cluster-based economic development strategies to help ensure a creative and supportive technological hub.

One way it achieves its aims is to give recommendations on economic policy and location-related activities, as well as developing plans to safeguard Frankfurt's future in business. Its location services, which it offers free of charge, are designed to speed up the process of founding a company, and the agency helps guide firms through the entire process. It can also put businesses in contact with professional lawyers, a notary, tax adviser, banks or experts for the specific sector a new company plans to operate in.

It's no easy task though. Countries with their own games development hubs surround Germany, including Finland, Sweden, France and the UK, and not forgetting cities closer to home, such as Hamburg and Berlin.

But Frankfurt Economic Development believes the city has just the right conditions to support entrepreneurs with the vision to open a new company, as well as supporting established firms in expanding their business.

"On their way to independence, entrepreneurs will experience individual advice and support by us," says Schiffner.

"Thanks to our excellent network with municipal authorities and the local business scene as well as to our extensive knowledge about various industries, we can provide valuable support in starting and running a business. Frankfurt has also a thriving games scene with a growing community, offering an atmosphere of trust and mutual support.

“The games community and Frankfurt, as a tolerant and cosmopolitan city, welcomes everyone with a huge melting pot of knowledge and open arms.”

To further fuel this growth, the agency has identified games as a key economic driver, a factor Schiffner says “cannot be stressed enough”. She adds that the city of Frankfurt is proud of being home to such a dynamic industry and wants to offer long-term and individual support for games industry-specific needs, rather than just adding games to other schemes where support may be slow.

“Big studios work on an international level and many smaller developers surprise with their artful and original projects, the young talents trained there were very much in demand,” says Schiffner. “The City of Frankfurt is very proud of their achievements. This is a display that shows that we are going in the right direction and proves that the Frankfurt metropolitan area is the right place to be if you want to be part of the innovative, creative, and technological future.”

INCENTIVISING BUSINESS

As seen in the previous article, Frankfurt is home to top triple-A companies such as Crytek and Deck 13, and *Star Citizen* developer Cloud Imperium has seen fit to open a new Foundry42 studio in the region. This is despite the lack of tax breaks enjoyed by other countries, where it could perhaps be more cost-effective to run a studio, particularly at scale. Though of course this may not always be a factor for multi-studio companies that can already claim elsewhere.

Schiffner admits tax incentives are always going to attract companies to set up shop in a region that offers them. And if there are no specific tax breaks available, “it is much harder for regions or countries to compete successfully within the global market”.

> ***“Frankfurt welcomes everyone with a huge melting pot of knowledge and open arms.”***
>
> Manuela Schiffner, FED

To compete then, she says there must be other advantages and incentives for business, such as access to fast digital infrastructure, to market, finance tools and human capital.

“All these you´ll find in Frankfurt,” she states. “Let us take a closer look to the appeal of the city for new habitants independently of specific tax breaks. Around 288 people per week [come to the city], that implies 15,000 people per annum come to live and work in Frankfurt.”

There are a broad selection of different financing tools available to entrepreneurs to build businesses. Frankfurt Economic Development supports devs with this by finding the right funding opportunities.

“We go on to filter the individual requirements from the companies so that they can make the right decision in order to guarantee investment, credits or venture capital,” says Schiffner.

Those aiming to open a studio in Frankfurt or wider Frankfurt Rhine-Main region may want to seek out the agency’s free advice and services when considering a move to the region. Frankfurt may not offer enticing tax incentives, but it does offer an ever-growing tech hub full of talent in an ideal location. ■

KEY STATS:

Frankfurt am Main population: 708,543
Frankfurt Rhine-Main population: 5.58m
Size of local creative industry: 7,800
Software and games sector turnover in Germany (2013): €31.5bn
Studios in region:
Deck 13, Foundry42, Crytek, Keen Flare
Relocation advice: www.frankfurt-business.net/en/for-investors/locating-a-company/
Frankfurt Economic Development website: www.frankfurt-business.net

FOUNDRY FORTY-TWO

FOUNDRY 42 IS HIRING

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P42

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Freejam's founder and CEO Mark Simmons shares his job tips

P43

GET THAT JOB

What does being a programmer at Bossa involve? Matthew Atkins tells us all

P44

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Looking for the next-gen developers

What are games companies looking for at the moment? **Develop** speaks to Amiqus' head of recruitment teams Stig Strand to see how job hunters can stand out

By Alex Calvin

Like any job market, it can be difficult to know just what potential employers are after.

But according to 2015 Develop Award-winning recruitment specialist Amiqus, recently there has been a big push for developers who can work on the newer PlayStation 4 and Xbox One hardware.

"Since E3, we've noticed that there been a big spike in demand for PS4 and Xbox One developers," head of Amiqus' recruitment teams Stig Strand tells *Develop*.

"Since the positive press about the consoles at E3, it feels like the publishers are starting to re-invest in pedigree console developers. That's been the main change in the market.

"Also, what's ongoing in the industry is a balancing of teams to attract more women into roles. Roughly half of the player community is female, but often we find it's less than 20 per cent females in development.

"Finally, due to the announcement that VR technology is on the horizon – hardware like Oculus Rift, Project Morpheus – there's a demand for people that are slightly technical in their roles and can wear multiple hats, because they're having to deal with a lot of physics-based reality techniques that need people who really want to solve technical problems in the future. That's an area of the market that's increased in popularity in the last three months."

But what tips would Strand offer to job hunters looking to get a foot up in the industry?

"We tell our candidates to embrace social media," Strand says.

> ***"Publishers are reinvesting in pedigree console developers."***
>
> Stig Strand, Amiqus

"A CV is usually the first point of call, with social media becoming a close second. People will quickly go online, have a look at a Facebook profile, a LinkedIn update, a Twitter feed to see if the candidate would fit within the culture of the company. Job hunters need to ensure they have a common theme across their social media. If you have a silly picture on Facebook, you wouldn't put it on LinkedIn.

"And online portfolios need to be up-to-date. You won't believe how many broken links we see being sent out. If that's the first piece of work that someone gets to see, then it won't leave a great impression."

And after you've impressed an employer so much they have invited you in for a job interview. What now?

"Always check the cultural fit of the organisation," Strand explains. "Speak to a recruiter or someone who works there and find out what the dress code is there to ensure you have the right outlook for the interview. That way you'll feel comfortable while you are sat there.

"Explain more about your background and experience. Make sure you have played the game from the studio you are going to see. It's really important to have a background and an understanding in not just the people you meet, but also the projects you are going to be working on in the future. Maybe have some ideas of your own for the game to potentially pitch in, some mechanics or features to show off your skills." ■

MOVERS AND SHAKERS

This month: Goodgame Studios, EA, Polystream, Fatshark and Riot Games

SIMON ANDREWS JOINS GOODGAME

GOODGAME STUDIOS The German free-to-play company has hired a new studio head. Industry veteran **SIMON ANDREWS** joins in this role from Spanish developer Bee Square, where he specialised in mobile games.

Andrews started his career at EA in Canada, working on the EA Sports brand. He helped to found the EA Big brand, and worked on the *Streets* franchise as senior producer. Following that he set up his own studio, Action Pants, which worked exclusively for Ubisoft. After the firm was acquired by Ubisoft, Andrews joined its Vancouver studio as studio manager.

"We are pleased to welcome Simon Andrews as head of studio at Goodgame," the firm's chief innovation officer, Dominik Willers said.

"Andrews brings valuable experience and knowledge through his work at several prestigious companies. This will be essential, especially in view of establishing a new team, thus making him a perfect candidate to lead our new studio."

> ***"Andrews brings valuable experience through his work at several prestigious companies."***
>
> Dominik Willers, Goodgame Studios

MOTIVE STUDIO Former Ubisoft Toronto MD **JADE RAYMOND** has joined EA.

She will be heading up its new Montreal-based Motive Studio, which is responsible for incubating new IP.

Its first project is Amy Hennig's new *Star Wars* game. In addition to joining Motive, Raymond will be overseeing Visceral Games alongside its GM, Scott Probst.

This isn't her first role at EA. Previously she worked as a producer on *The Sims Online*.

In 2004 she joined Ubisoft Montreal as producer on *Assassin's Creed*. In 2010 she moved to Ubisoft's Toronto studio. She departed the company in 2014.

POLYSTREAM Cloud gaming firm Polystream has announced it has hired OnLive founder **BRUCE GROVE** as CEO.

Grove is best known for his work with cloud gaming firm OnLive. He worked there between 2007 and 2015, starting as senior director of engineering and strategic relations, before being promoted to general manager in 2011. He worked there until the firm shut down its service in April 2015.

"Polystream is already impressing early partners for two key reasons; the first is we can demonstrate next generation technology without the cost and performance hang-ups previously assumed to be inherent in all streaming solutions," Grove said.

FATSHARK The Stockholm-based indie developer has hired a new COO.

SVEN FOLKESSON joins the *Warhammer: End Times* studio from Nuday Games. His appointment comes ahead of the launch of the studio's new game, *Warhammer: End Times – Vermintide*.

"I've been following the Fatshark team for some time, and am delighted to come on board as COO as the studio moves from third-party development to a self-publishing model," said Folkesson.

"The upcoming launch is an exciting time, and the perfect opportunity to cement our reputation as an innovative, technologically advanced developer who is building new properties that will be loved by a new generation of players."

RIOT The *League of Legends* developer has hired **JEM ALEXANDER** as a staff writer.

Alexander has previously worked in journalism – freelance and staff jobs – as well as PR roles. He started writing for Joystiq in 2007, then went on to work at SCEE, *OXM* and Square Enix.

At Riot, Alexander will be tasked with copy writing, creating player-facing editorial for lolesports.com and covering *League of Legend* tournaments.

"I'm very excited to be a part of the Riot writing team in Brighton," Alexander said. "I've been avidly following the *League of Legends* eSports scene for a while now, so I'm looking forward to bolstering the editorial output in the run up to the World Championships."

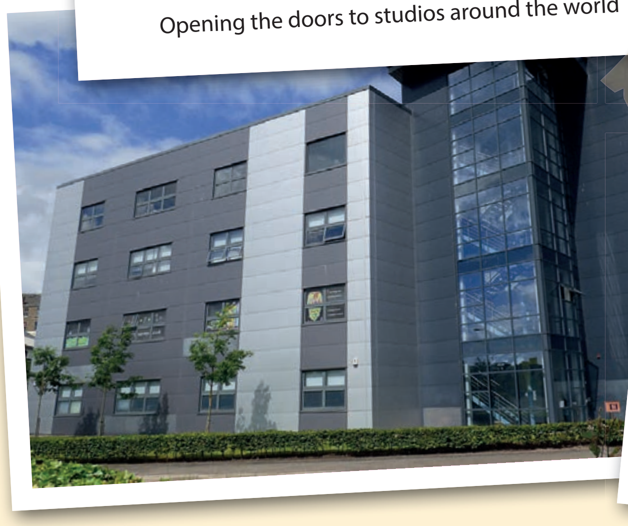
THIS IS WHERE WE WORK

Opening the doors to studios around the world

TAG GAMES

Dundee, United Kingdom
www.tag-games.com

Tag shares its building with four other games firms, and is situated in Dundee's £1bn waterfront development. With high winds, the building is designed to sway – something the studio says is off-putting for visitors.



RECRUITER HOT SEAT

CEO and co-founder of Freejam **Mark Simmons** on how to get a job at the Portsmouth-based developer

BOCRAFT
D · DRIVE · FIGHT
ROBOCRAFT
BUILD · DRIVE · FIGHT
DEVELOPER JAMMER

BIO

Name: Mark Simmons
Title: CEO, Game Director and Co-Founder
Company: Freejam
Location: Portsmouth, England
Hiring:
2D/GUI/Graphic Artist, Games Programmer, Games Server Programmer, Level Designer & Environment Artist
Where to apply:
robocraftgame.com/jobs

> ***"Research the role, what's likely to be expected and how you will own it."***
>
> Mark Simmons, Freejam

What differentiates your studio from other developers?

At Freejam we have a combination of attitude and experience that sets us apart. We're true believers of the indie ideal – independent, agile, creative – always testing, innovating, learning and improving. We actively encourage our staff to share their ideas – we want to hear them all, and test them as soon as possible. We have a huge number of ideas to explore; we always want more ideas and now we need more people to help us with them.

How many staff are you looking to take on?

We are looking for a number of people across most of the development and publishing disciplines at present. Currently we have some truly great opportunities available in game and server programming, level design and 2D/GUI artistry.

What perks are available to working at your studio?

On a day-to-day basis, new recruits will get to work alongside – and learn from – our proven team who are all top of their fields. Though they'll also join us in shaping the evolution of *Robocraft* and the company.

In terms of employment perks we offer competitive salaries as well as extensive benefits including an excellent holiday package, flexi-time, subsidised gym memberships and discount shopping at Gunwharf Quays. Our office is located at a stunning harbour with awesome views across the Solent.

What should aspiring devs do with their CV to get an interview?

Keep the CV clean and simple, clearly listing all relevant skills and experience. Where possible, make sure your passion for gaming shows in your CV. Include links to your portfolio and previous projects, where applicable, in your cover letter or email.

Who is the best interviewee you have ever had and how did they impress you?

Most recently, we interviewed a Portsmouth University graduate from Hungary. He aced the interview, really got 'us', and knew the game and his subject matter inside out. Then he aced internship, so we hired him full-time.

And who was the worst?

It is difficult to say, we've had a lot of talented people apply to join us, and we tend to remember the really good ones – because we hire them. We tend not to remember the ones that hadn't researched our game or company, or didn't give much thought to how they could help us with the challenges and opportunities we face.

What advice would you give for a successful interview at your studio?

Research Freejam and *Robocraft*, what we're about and what the media and community are saying about us – try and get a good feel for us as an indie studio with nearly two years of live service, a large and active community and growth ambitions.

Research the role, what's likely to be expected and how you will own and evolve it.

Bring some ideas on how you can help us continue our success – maybe we'll have thought of them; maybe we haven't and they are super cool ideas. There's no such thing as a bad idea, so we appreciate candidates who have given some thought to our situation.

Bring examples of your previous work – show-reel, portfolio, sketchbooks, assets you've created or directed, demos or code samples – relevant to the role and your experience and skills.

How has your recruitment needs change at your studio?

In the early days, the five founders did everything. Some tasks were second nature to us; some we had to crash course to understand, and others we had to learn and deliver on the fly. As we learn more and more about developing and publishing live games services, we increasingly need to hire new experts across all areas, and new raw talent to support those experts and become the veterans of the future. We need more of the core development skills: art, design, programming, QA and new skills too, like analytics and publishing. And we need people that bring new ideas to the table; who can be effective in a creative, agile and fast-moving collaborative environment.

Why should developers join you when indie and self-publishing have become so much more accessible?

Well, that's how we started, and we're still there, perhaps with a little more scale. We're still a self-publishing indie, but because of the nature of games-as-a-service, we have much more to do for our community and to realise the potential of the game and our ideas. So we need to scale-up while maintaining our indie attitude. As well as joining a creative, flexible and dedicated team, there's the challenge, learning and rewards of working on a veteran project, while helping us innovate and implement new ideas and technology to grow *Robocraft*.

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GET THAT JOB

Development specialists offer advice on how you can bag that career leap

THIS MONTH: PROGRAMMER, WITH BOSSA'S MATTHEW ATKINS

What is your job role?
I am a programmer at Bossa in London.

What qualifications and/or experience do you need?
A degree in a technical field will help your chances of landing your first programming job in the industry. But by far the most important thing is to have well developed coding and games development skills that you can demonstrate. If you don't know a programming language you'll have to learn one from a textbook or a course. Preferably one that is commonly used in games such as C++ or C#. You will have to learn other languages throughout your career but just learn one well first, the others will come easier.

How would someone come to be in your position?
You have to love writing code and solving problems so much that you will happily spend most of your free time doing just that. This is how you get proficient. If it feels like work, that is a problem because you will burn yourself out and lose interest. You have to enjoy failing as much as succeeding so that you keep moving forward no matter what happens.

> ***"If coding feels like work, that's a problem as you'll burn out and lose interest."***
>
> Matthew Atkins, Bossa

You'll also benefit greatly from keeping up-to-date with what engines and tools are widely used by studios today. So you have to research actively and attend events where you can ask other developers about the tools they use. Events are not only a source of practical knowledge but also a chance to network, which often leads to work opportunities.

If you were interviewing someone, what do you look for?
I'd look for passion, willingness to learn and for examples of their work that impress me. If they're a graduate I'd want to see that they have made things in their own time that are playable and commendable.

What opportunities are there for career progression?
As a technical person there's often opportunities to get hands-on with brand new tech that the public will not even see for months or years. When these opportunities come along you have to make the most of them because you never know where it might lead you. The past five years has seen many studios turn to mobile gaming, and now many are turning to VR. What will be next?

If you've got job advice to share, email **Alex Calvin** at **acalvin@nbmedia.com**

Employee HOT SEAT

Software engineer **Lyndon Jones** discusses how he landed his current job at work-for-hire firm d3t

What do you do at the studio?
I work as a software engineer on games and non-games projects, using lot of different languages and on a lot of different platforms. Because we are a pure work-for-hire studio, sometimes I'm working on full game projects, other times I'm helping with specific tech development work for other studios. I also mentor junior staff.

How did you get your current job?
D3t has great connections with universities and regularly attend career events. I saw an advert for d3t in the University of Manchester careers platform, and the sheer variety of work struck a chord with me. My portfolio and background as a physicist allowed me to bring a unique perspective to the company and I was offered the opportunity to start full-time after completion of my MA.

What perks are available to those working at the studio?
As we are work-for-hire, we are fortunate to be involved with a wide variety of projects, from tech work on *The Witcher 3*, to a full product reboot of *Super Stardust*, to bringing *Lemmings* to the Vita, to productivity apps and back-end systems. Every project has its own unique challenges, and the work is usually very difficult but incredibly interesting. Individual project ownership and personal responsibility are strongly encouraged within the studio, and this makes us all want to exceed expectations. We regularly send some of the team to relevant conferences, such as GDC, and social events like karting are always popular.

What is the recruitment process like at your studio?
We are always looking for great talent, so we recruit through the channels that will bring us the highest calibre candidates, like ads in *Develop*, and also using our preferred agency Amiqus. We have take-home coding tasks for our technical applicants, and use Skype first-stage interviews for our overseas applicants before flying them in.

> ***"We are a work-for-hire studio, so are involved in a variety of projects."***

During some recent training a group of us identified our recruitment process as being a key strength – it means only the best get through. That makes us all feel pretty good about ourselves too.

What was your own interview like?
I had two on-site interviews both involving practical programming challenges which were high-pressure but a lot of fun. Spending a few hours working in the office allowed me to get a sense of company and the people I'd be working with. One of the technical assessments I did was a real-world problem on a project which I later ended up working on, so I knew exactly what I was getting in to and I was keen to start as soon as I got my offer.

Describe what the atmosphere is like at your studio?
We have a relaxed but hard-working environment, with free refreshments and flexible working hours. The management team are receptive to suggestions – knowledge-sharing and supporting each other is a core company value here.

Name: Lyndon Jones
Title: Software engineer
Developer: d3t
www.d3tltd.com/

SKILLS AND TRAINING

This month: University of Bolton

University of Bolton
Deane Rd,
Bolton,
BL3 5AB,
United Kingdom

T: 01204 900 600
E: enquiries@bolton.ac.uk
W: www.bolton.ac.uk

THE UNIVERSITY OF Bolton offers a host of games-related courses for aspiring industry professionals looking to learn their craft.

Courses available include a BA in Games Art, with a focus on sculpting, modelling and texturing, BSc Game Programming and a BSc in Game Design, covering production, level design and narrative, as well as an introduction to programming and art.

A new Masters course is also in the works, based on setting up a studio and taking a game all the way to market – an important side of the business sometimes glossed over.

> ***"Our philosophy is that we want no surprises in the interview room."***
> Judah Smith, University of Bolton

University of Bolton uses its relationships with the games industry to get its students work experience, thereby preparing them for the world of work

"Our philosophy is that we want no alarms and no surprises in the interview room," says academic group coordinator for the School of Creative Technologies at Bolton, Judah Smith.

"When an employer asks whether you have experience in the work and packages they use, our students can give a confident 'yes'. We're constantly strengthening our ties with the industry to make sure that the skills we teach can open the right doors. We also have a world-leading Game Narrative module that's so good a university in California has asked us to teach it for them."

To ensure that its students are prepared for life in the industry, the University of Bolton promotes means of getting real work experience.

Smith claims the educational institution had the largest graduate intern programme in Europe last year, in partnership with International Hobo, where students did QA, design and narrative work for a commercial release. It has also had finalists in Abertay's Dare to be Digital competition for two of the last three years.

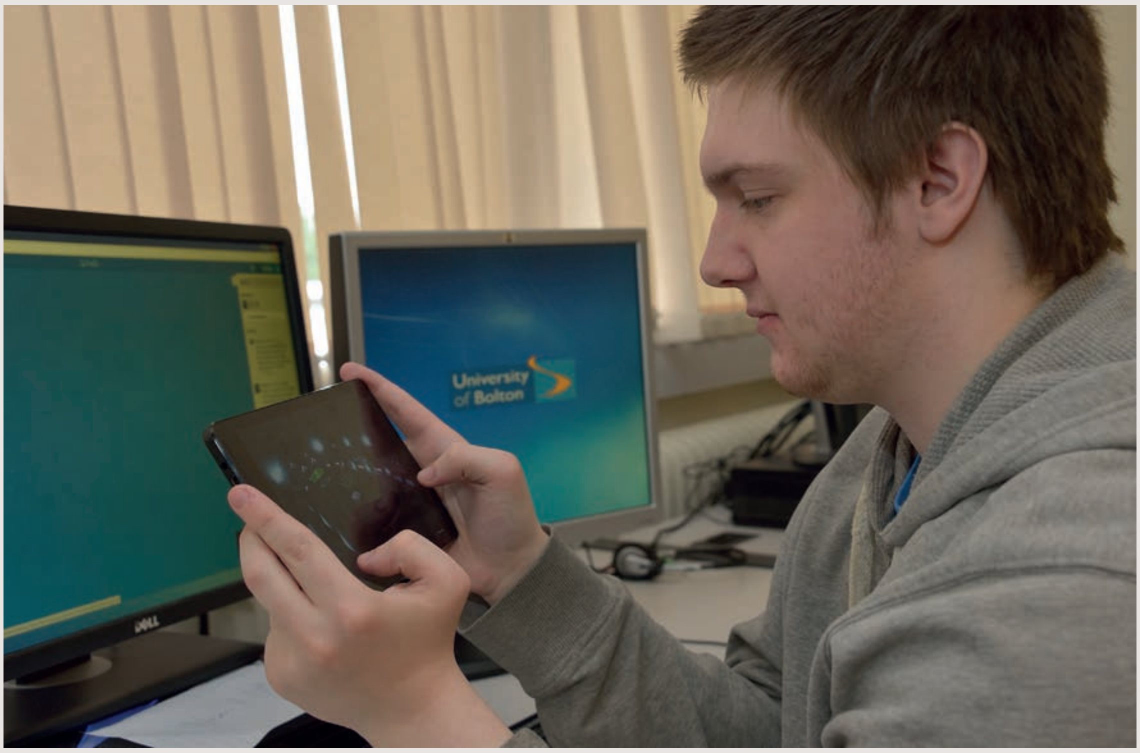
Pupils are also supported in making and exhibiting their own games, and it has students working across the summer to gain experience before returning for their final year.

Bolton provides an invaluable set of tools and tech to ensure students are proficient in industry-standard software. This includes access to Maya, Unreal Engine, Unity, Visual Studio, PhotoShop and hardware such as the Oculus Rift, Vita and Leap gesture controller.

It also has a number of close links with studios across the country, thanks to the success of its alumni.

"These [partnerships] are often with Bolton alumni who have thrived in the industry and want to reconnect with the university" said Smith.

"Our graduates make it easy for us, as their success in places like Traveller's Tales, Codemasters, and Ninja Theory means the work we do is well-regarded throughout the UK and beyond."



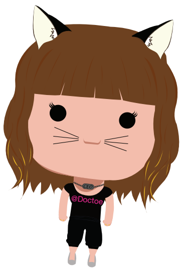
INFO

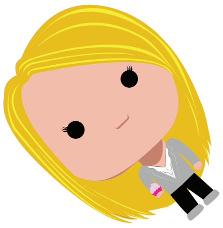
Courses: Games Art (BA), Game Programming (BSc), Game Design (BSc)

Country: United Kingdom

Founded: 1852

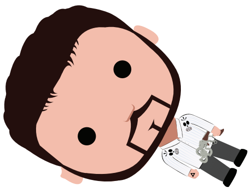
Staff: Tim Ash (Programme Leader), Craig Fortune (Programme Leader), Dr. Steve Manning (Programme Leader), Dr. Chris Bateman (Researcher and Senior Lecturer), Andrew Williams (Senior Lecturer), Brian Morris (Senior Lecturer), Judah Smith (Senior Lecturer), Jo Daly (Lecturer), Mark Whyte (Lecturer), Andrew Simpson (Lecturer), Rebecca Mayhew (Associate Lecturer)

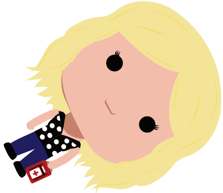




Congratulations

to all the Develop Award winners from all of us at





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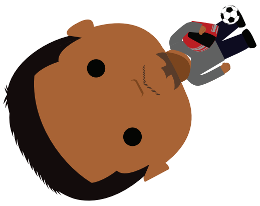
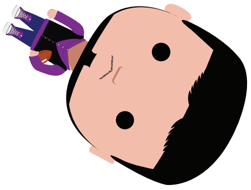
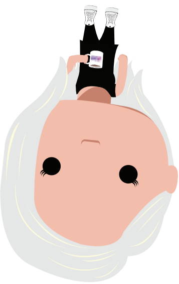
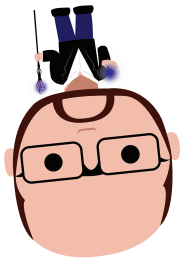




Speak to sam@ukie.org.uk about being part of the family



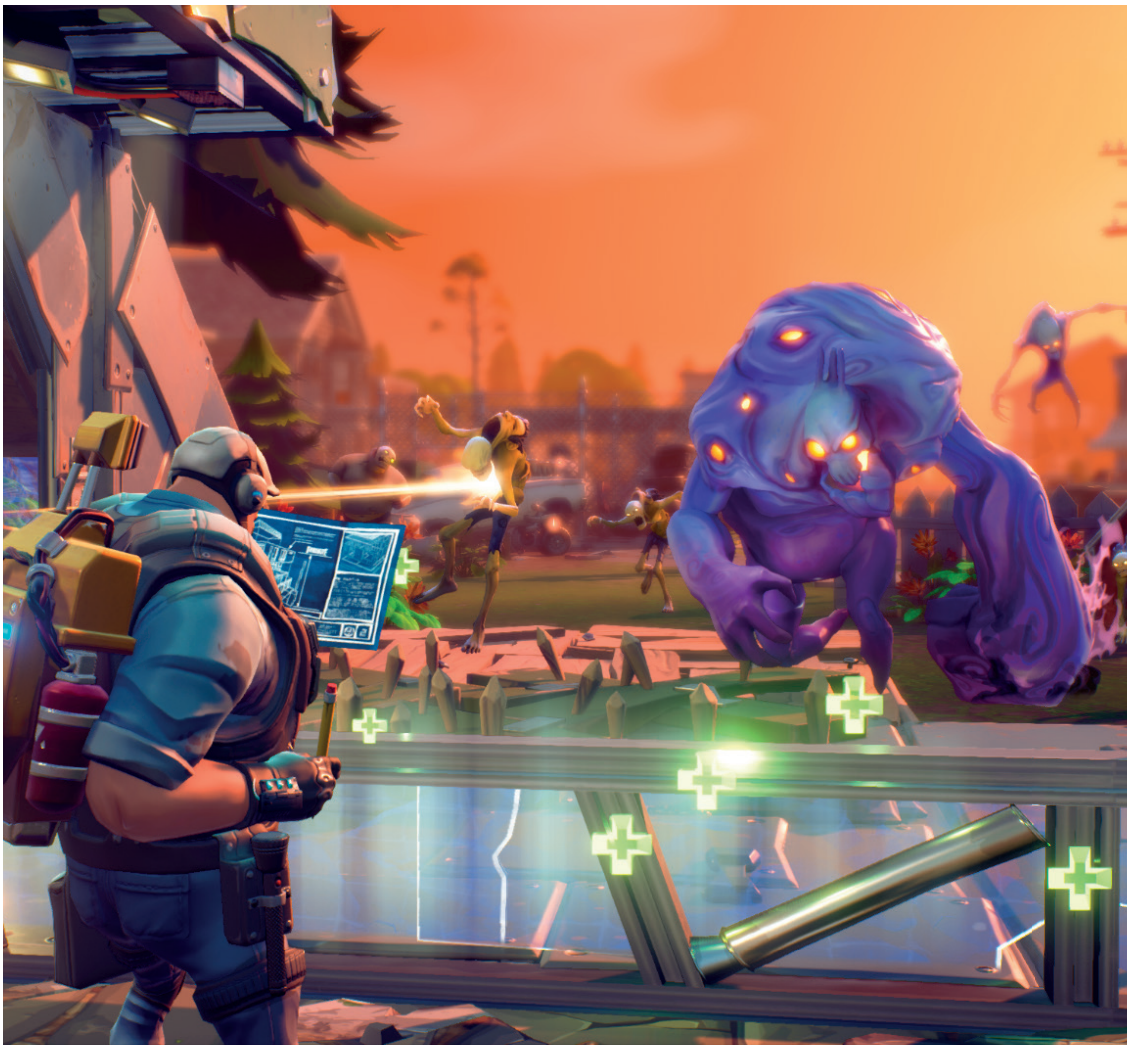


BUILD

THE LATEST TOOLS
NEWS, TECH UPDATES
& TUTORIALS

AI’s next frontier

With all the advances already made in video games AI, where is there left to go? **Craig Chapple** asks the experts where the technology goes next



AI IN GAMES is more believable than ever. Nearly gone are the days where the hostages you rescue run head-on into battle without any form of protection or weapon, intent on filling up your crosshair.

When we last visited AI, there was much talk of cloud computing being used to enhance AI, as seen in *Forza Motorsport 5*. But where does AI in games go now?

Epic Games lead AI programmer Mieszko Zielinski says the next frontier for artificial intelligence is deep learning. This is the latest trend in machine learning, where AI can recognise objects and speech. It’s something ex-Lionhead dev Demis Hassabis has been working on at his new start-up Deep Mind, acquired by Google in January 2014 for a reported $400m.

“This is the ‘real’ AI, but it’s applicable to game AI as well,” says Zielinski. “We haven’t had a chance to have our stab at it just yet, but I do have a couple of cool use-cases for these fancy algorithms – smart game level generation being just one.”

SMART TRICKS

But for all the advancements that have taken place, can AI be too smart for players? Matthew Jack, CEO of Moon Collider, which creates the AI tool Kythera seen in *Star Citizen*, believes few people enjoy being outsmarted when playing games, and says computers these days “can easily outsmart humans in many scenarios”.

“Good AI design is about appearing smart, which sometimes means you have to ‘hide’ information from the AI to help it make human-like decisions,” he says. “And don’t forget that a smart AI is also important to developers – who need a system they

Epic Games lead AI programmer Mieszko Zielinski (above) says in its upcoming game Fortnite (main), the AI’s representation of the world needs to be constantly updated based on the user-generated content

TOP TIPS FOR AI
Developers offer useful tricks and things to consider when implementing your AI
P50

MANAGING DEVELOPMENT
We take a look at the best ways to track your game’s progress
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UNITY FOCUS
How Bossa used the Develop Award-winning engine for its quirky game I Am Bread
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CRYENGINE
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4

Top to bottom: Moon Collider CEO Matthew Jack and Havok AI lead developer Ben Sunshine-Hill

Main: Moon Collider's Kythera tech has been used in games such as Umbra and Star Citizen

can work with at a high level without them having to explain every little step."

Zielinski agrees, and further states that developers are in the business of entertainment, so the main purpose of AI in games should be fun.

"We often force AI to do things that will look good, or make players feel good, even though those are not the smartest things to do," he says. "Why do you think AI soldiers are peeking out of cover when there's a human sniper looking at them?"

Havok AI lead developer Ben Sunshine-Hill says while AI can exhibit too much superiority for players, it's not quite the same as being too smart for players.

"Giving AI-controlled characters the ability to operate rationally and competently is important, even if you then throttle how effectively they use that ability, because then the precise level of competence is chosen to serve the design, rather than being imposed by the technology," he states.

"To put it differently: It's possible for AI to be smart and act dumb. It's not possible for AI to be dumb and act smart."

TAPPED POTENTIAL?

If there are limitations being enforced on AI in the name of fun, perhaps another question for the industry is, given such advancements already made, are developments in the field really that important anymore?

Jack says there is still room for improvement, and that with another area of games plateauing – graphics – AI is emerging is a key differentiator.

"There's a lot of potential left untapped," he says. "There's a huge gulf between what designers would like to see, and what's traditionally been feasible to deliver within the schedule of a single game's development. So I think there are a lot of opportunities ready to be unlocked by the next generation of middleware. If anything, AI is going to be increasingly important for the games business."

Sunshine-Hill admits that the industry has settled into a comfortable place in regards to AI. He says genres have evolved to compensate for, and minimise the effect of, the deficiencies in current AI techniques. These in turn have also evolved to support the use-cases specific to those genres.

Perhaps then, evolution in AI will come about in tandem with new genres and gameplay experiences, such as in Creative Assembly's terrifying *Alien: Isolation*, where the Alien feels truly alive.

> ***"New AI techniques can make creating believable characters in games easier and quicker."***
>
> Mieszko Zielinski, Epic Games

"Advances, ultimately, will be driven by the design side of things," says Sunshine-Hill. "But I doubt neither the designers' drive to innovate, nor the programmers' ability to tackle the challenges presented by that innovation. It's just a matter of time. And money."

Zielinski says AI shouldn't just be defined by what is seen on the screen, as the industry already reached the level of AI necessary for creating believable opponents some time ago. The way the tech makes a difference now is supporting creators.

"AI can assist developers in creating levels," states Zielinski. "New AI techniques can make creating believable characters easier and quicker. AI can even be used to generate and filter game scenarios, like RPG side-quests. There are many domains AI techniques can be successfully applied to to speed up or improve quality of work of human developers."

And despite great examples in recent times of near-believable AI companions, such as *BioShock Infinite*'s Elizabeth or Ellie in *The Last of Us*, Zielinski still believes there's huge room for improvement.

"There are really good examples of faking it to a very good result, like Elizabeth in *Bioshock Infinite*, but those cases heavily depend on a given game's specific characteristics, linearity and level scripting," he explains. "It's all smoke and mirrors still, and we'd like to see 'real' AI in games at some point. It's currently not possible, and hardware is the main thing restricting us."

BRAIN POWER

Expanding on that last point, Zielinski describes it as one of the key challenges of developing AI. The technology that drives it has always struggled with the hardware limits, and this looks set to continue into the current generation and beyond.

"It's not that the hardware is 'weak', it's that AI is always getting scraps of processor time and memory," he states. "With that in mind, AI is now required to populate vast, open worlds, navigating those worlds like humans would, never forget a thing – which in itself is 'artificial' – and 'just feel real'. That's a hell of a lot to handle in 15 per cent of your frame time."

Sunshine-Hill adds that the processing budget is a perennial concern for developers. Even as each console generation improves on the last, he believes there is often never enough processing power to match ambition.

"The high-level behavioural control isn't particularly expensive right now – though it may get more so, as planning-based systems gain traction – but the low-level

query and executive systems underlying them will suck up as much CPU time as you're willing to throw at them," he explains.

"Humans bring a staggering level of computational power to bear when executing even the simplest of tasks. Our challenge is to emulate that skill, with a fraction of the time on a CPU with a fraction of the power of the brain."

AI ON-THE-FLY

He goes on to say, however, that despite restrictions comparative to the human mind, there is a lot more within the realms of possibility on new hardware.

In fact, as games increasingly focus on both expansive worlds that are both destructible and allow players to construct new buildings and objects within them, AI faces an entire new frontier. It must remain believable while adapting to a world that can constantly change around it.

Epic is taking this challenge head on with its upcoming game *Fortnite*. Players collect resources during the day, and must use these to build a fort to protect themselves from the onslaught of monsters at night. This requires AI with reliable spatial information for navigation purposes, to ensure they are never perplexed by new objects.

"Whenever a player destroys or builds something, the simplified representation of the world that AI is using for its calculations needs to be updated," explains Zielinski. "Regular tricks of creating hierarchies of representations just doesn't cut it, with the frequency on the changes to the world we're facing."

Jack says that with its Kythera AI tech, one of its starting assumptions is that levels will change at run-time. One of the biggest design implications here, he says, is that they avoid reliance on pre-processing steps.

"Navigation meshes, and everything else, can be built on-the-fly," he says. "Allowing that kind of responsiveness requires good design, and hard work on performance, but the end results are simple to use – and once you have the framework in place you keep finding unexpected benefits."

Jack is also mindful of another challenge facing AI: the pace of games development.

"As free-to-play and backer-driven models rise, it is becoming the norm for games to offer substantial updates every few weeks or months – and the AI industry still needs to adjust to that rapid cycle," he explains.

THE NEXT STEP

Despite arguably plateauing in some areas of traditional AI in games, our experts still believe there are many directions AI can go next.

Zielinski says one direction is designer or artist-guided procedural content generation, and then AI autonomous content generation – i.e. generating entire living worlds on-the-fly based on a set of parameters. It's a description that evokes thoughts of Hello Games' upcoming *No Man's Sky*.

Jack believes the next big visible advance in the AI space will be scaling, driven by the development of cloud computing in the wider tech industry.

"For a multiplayer or MMO game, the cloud is a natural place to be, and even single-player games have a push to make use of more cloud services," he says. "When those massive computing resources can be shared across a group, you have the raw computing power to scale up from a handful of agents to rich, fully-simulated worlds."

Sunshine-Hill says between the increased console power and engineering work of teams like Havok's own, AI characters can now be more observant and reactive than ever before.

"Developers will see different opportunities in that," he says. "Periods of rapid evolution tend to lead to a lot of weird species. I'm looking forward to playing all of them." ■

KEEN ON AI

MAREK ROSA, CEO of *Space* and *Medieval Engineers* developer Keen Software House, recently opened a new company named GoodAI. The goal of the firm is to develop real AI, and so far Rosa has pumped some $10m into achieving that vision.

But the venture will also have significant implications for games too. Its development team recently released Brain Simulator, a visual tool where users can design their own artificial brain architectures. By integrating this into its games, players will then have the option to design their own AI brains and can implement them as various character types, such as a peasant.

"Players will also be able to share these brains with each other or take an AI brain designed by us and train it to do things they want it to do; work, obey its master, and so on," explains Rosa. "The game AIs will learn from the player who trains them – by receiving reward/punishment signals; or by imitating the player's behaviour – and will have the ability to compete with each other. The AI will be also able to learn by imitating other AIs.

"This integration will make playing *Space Engineers* and *Medieval Engineers* more fun, and at the same time our AI technology will gain access to millions of new teachers and a new environment. This plan is still in early stages and there are many things that we have to design."

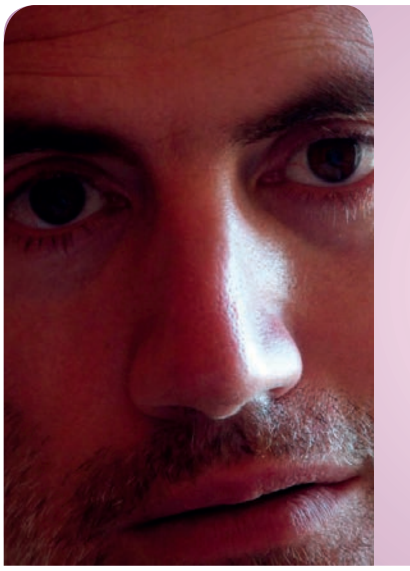
DEVELOP'S TOP TIPS

CREATING BELIEVABLE AI

Experts pitch in with their top tips, tricks and things to consider when creating AI

Luke Dicken, senior data scientist, Zynga

■ ***AI (or machine learning or data science – it's largely the same thing) needs to be something that devs think about from day one. Don't tack it on at the end, build with it in mind. Do you need a fancy system for <this> in your prototype? Probably not, but you want to be able to drop it in easy, so think about it early.***



Thomas Young, owner, PathEngine

■ ***Don't try to separate AI implementation from game design. For best results, possibilities and constraints on the implementation side should be considered together with game design possibilities and constraints, in a search for the best global solution. More concretely, it's a good idea to ensure that AI programmer roles 'officially' overlap with design roles.***

■ ***It's much easier to build robustness into your agent movement at a lower level than to implement the logic for this higher up your agent movement stack. Consider using a simplified collision model, since that's much easier than the higher level AI for more arbitrary collision. Try to deal with stuff like approximation and range errors at an architectural level.***

Martin Linklater, lead programmer, Playrise

■ ***Drill into the game design on what behaviours need to be present in the game and what don't. Get the game design team to think about what behaviour they want the AI to demonstrate to the player – rather than discussing what techniques they think we should use.***

■ ***Separate the AI into layers: strategy, tactics and control. Strategy deals with long-term goals and desires. Tactics deals with moment-to-moment decision-making. Control deals with frame-by-frame control over the AI avatar.***

James Carroll, Director, Evil Twin Artworks

■ ***Start simple and build up. Keeps things reasonably generic as no matter how much you plan you will always realise there is more to add. Artificial intelligence never seems to work the way you want, it is always surprising. Set up a separate testing ground outside of the core game, a more controlled environment to see where the AI is working – or not working.***

Chris Emmett, senior programmer, Payload Studios

■ ***It's important to make your AI seem believable – demonstrating abilities or knowledge that the player doesn't have puts them on an uneven keel and can seem unfair. For example, simply making your AI wander and search towards the player's direction, rather than heading straight for them, helps with both believability and player immersion.***

■ ***It's important to choose the best tools for your game, as AI can often make or break a game. Using a method that can be represented visually, such as behaviour trees, decision trees or stack-based state machines allows you to easily see the big picture, letting you tweak and change things to give you better AI.***

Anna Ljungberg, AI programmer, Radiant Worlds

■ ***Have plenty of debugging tools that will not only help when something goes wrong, but will also test and prove the AI's working as intended. You need to be confident that the brain in your AI system is doing what it's supposed to, and the easiest way to know that is to debug render exactly what the brain's doing.***

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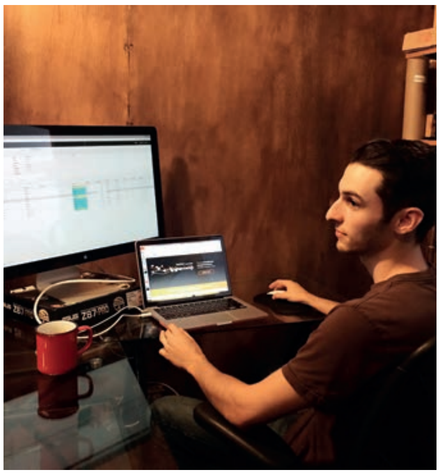
Next Release



Keeping your game on track

Developing a video game is no small endeavour, and tracking its progress is essential. We find out how version management tools can help

Hansoft's Jon Leslie (above) says it's important for studios to use version management to not only track a game's progress, but also enable more communication between their teams

AS THE LENGTHY credits of any given game will tell you, most video games are not the product of one mind but the combined efforts of dozens, hundreds or thousands of people.

It might be assumed that each of those people simply serve their role, complete their set tasks and the game magically comes together, but the truth is that someone needs to be tracking each person to ensure development is on schedule.

Fortunately, there are a plethora of version management tools on the market – and the firms behind them say devs might not understand the full benefits of this software.

"A good project management tool should not just be used for planning and tracking, it should be a collaboration platform for the entire development team," explains Hansoft senior coach Jon Leslie.

"Such a tool allows all team members – whether they are artists, software engineers, audio engineers, animators, and so on – to track their own tasks, enter tasks for others, share documents, provide real-time feedback for feature or asset reviews and so on. This makes the producer's job that much easier.

"If your team members, studio management and publishers can answer their own questions, they don't have to constantly ask production how the game is tracking towards completion."

Luke Household, software engineer at Tactic developer Southpaw Technology, adds: "It's an incredibly collaborative feat to make a game, and it takes some solid tools to get it done. With so many departments working on so many components simultaneously, software that versions files, tracks task status and automates many of the manual workflow challenges can play a major role in transforming a potentially hectic process into a smooth one."

However, while there are plenty of tools out there that serve a variety of functions, Perforce's director of product marketing Mark Warren urges studios to choose which one they use carefully.

"It's important to keep the tooling as simple as possible and not have multiple tools trying to do similar work," he says. "So standardise on one version management tool and have all of the elements of the game – code, textures, audio, graphics – in one place. Not only does that improve visibility but makes things a lot easier for managing backups, monitoring and controlling access, and allowing faster and easier builds."

GO WITH THE FLOW

Another advantage of using version management software is that it helps studios prepare for and keep track of any dramatic alterations necessitated by the ever-changing nature of games development. For a start, it enables what Warren refers to as 'parallel development'.

"If developers have to work serially, they will take longer to complete a task and projects will undoubtedly be delayed," he says. "Also, being able to quickly and safely roll back a change when something isn't working correctly is vital. After all, it's rare that every change is perfect first time."

It's not just the process of development that becomes more efficient. Some studios have found that using such software has streamlined a project so much they have actually cut down costs in the long run.

"Time is money," says Household. "The idea is that people spend less time figuring out what to do and more time doing what needs to be done. These solutions mean that people don't have to go looking through emails or getting on the phone to their supervisors to determine what they've been tasked with.

"Another way money can be lost is when people end up doing work that has already been done. Without proper communication between all parties involved, inefficiencies can become very common. By bringing the right information to the forefront, project management software significantly reduces this possibility and helps people build on each other's work instead of wasting their own time."

But, he stresses, saving time is not just about money: "If an artist can save 30 minutes a day using this software, he or she typically will use that saved time to create one more iteration of a texture or character or scene. Saved time can drive up the quality of the end product."

Github's VP of strategy Brian Doll adds: "Additionally, all those discussions and resulting decisions that affect your game

Top to bottom: Luke Household of Tactic developer Southpaw Technology and Mark Warren of Develop Award winner Perforce

are now available to the whole team, ensuring you're all on the same page."

Doll says that communication is as crucial to project management as version and progress tracking. Certainly a key function of GitHub, the widely-used online collaboration platform, is that it enables teams from around the world to stay in constant contact.

"The most important thing is to talk to each other," he says. "Actively participating in the discussions surrounding a project not only helps you ensure everything is on track, but your participation can also positively influence its direction and pace."

TRACKING YOUR TEAM

You might be forgiven for thinking version management tools are primarily aimed at large and triple-A studios, but they can prove to be just as useful for smaller and independent developers.

"Once a team gets to be above 30 members, it's virtually impossible to organise and track efforts and make sure everything is moving in the right direction," Leslie says.

"However, there's no doubt that smaller studios and indies can also benefit from a project management tool. Even if you're a team of one, it can be handy to use a tool for creating your game's backlog and determine what aspects of your game should be worked on first and how."

Household adds: "In the case of a small company, things tend to be very fast paced, and managers are doing a lot more than just managing. An effective project management software can be the difference between a manager drowning in tedious work and being able to put time into where they are most needed."

Regardless of the size of your company, version management is vital if you have contractors or members of your team overseas and in different time zones.

> ***"Being able to roll back is vital. It's rare that a change is perfect first time."***
> Mark Warren, Perforce

"It's hard enough for two people sitting next to each other to work on the same code base – it gets harder when you're on different floors of the same building," says Warren. "Being on different continents is near impossible unless you have a shared view of all the assets in the game.

"Having that kind of distance also introduces new requirements, especially in terms of performance – if a remote site has slow access, they will use the tool less – this increases risk. Studios should look for tools that are built to support distributed teams and don't just rely on network connections."

Ultimately, the biggest advantage of using version software is the ability to improve the quality of your game. By removing many of the problems of large-scale development – or at least making them easier to identify and solve – studios can focus on visions, not versions.

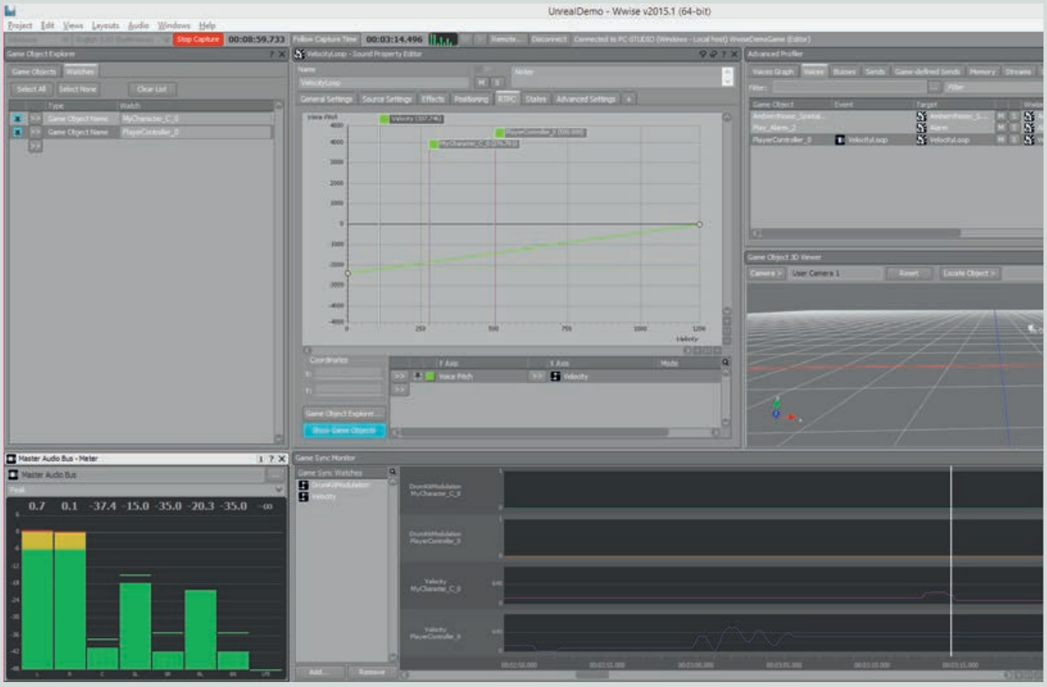
"Managing change in a large software project can be complex," says Doll. "But in games development, you're managing change not only with the software, but also with the graphics, animation, video, storyline, and possibly even the underlying physics engine.

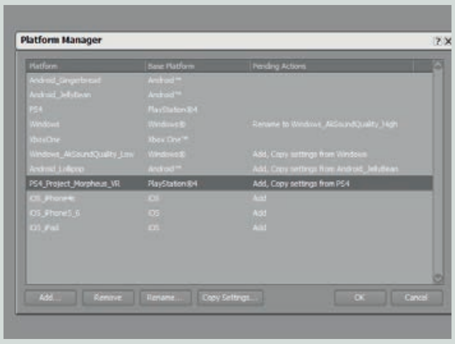
"By using version control, companies are able to bring these teams of people together to build software faster. Managing these changes is easier, so teams will often have dozens or hundreds of changes being developed concurrently, improving the game with every step."

Warren adds that since so many of these tools are available to download and use for free, there's very little excuse for developers not to use them.

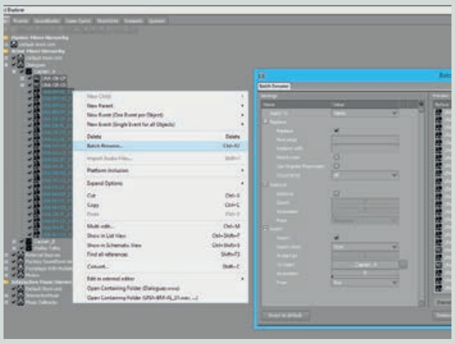
"We encourage our smaller customers to start as they mean to go on," he says. "After all, they could end up being the next up and coming studio. As an indie or start-up, you probably feel even closer to the game you're building and have put so much time and effort into, so you owe yourself the comfort of know your work is protected.

"Games development without version management is like jumping out a plane without a parachute. It'll be fun and fast for a while but eventually it's really going to hurt." ■





Platform	Base Platform	Pending Actions
Android_Gingerbread	Android™	
Android_JellyBean	Android™	
PS4	PlayStation®4	
Windows	Windows®	Rename to Windows_AkSoundQuality_High
XboxOne	Xbox One™	
Windows_AkSoundQuality_Low	Windows®	Add, Copy settings from Windows
Android_Lollipop	Android™	Add, Copy settings from Android_JellyBean
PS4_Project_Morpheus_VR	PlayStation®4	Add, Copy settings from PS4
iOS_iPhone4	iOS	Add
iOS_iPhone5_6	iOS	Add
iOS_iPad	iOS	Add



KEY RELEASE

DAW of a new era

With 2015.1, Wwise is striving to bridge the gap between video games and digital audio workstations

Audiokinetic's Mike Drummelsmith says the integration of Wwise with Steinberg's Nuendo 7 is a major bridge between the worlds of game audio and leading DAW firms

IN THE WORLD of game audio, Audiokinetic has long championed an artist-driven approach to sound pipelines with its pervasive Wwise solution.

And with the latest 2015.1 release, which follows last year's significant overhaul, it is now positioning itself as a means to cement the bridge between game production and traditional digital audio workstations.

Broadly speaking, 2015.1 focuses on fostering efficiency, adding improvements to workflow and authoring capability.

But its most significant introduction may be its new integration with the Steinberg Nuendo 7 digital audio workstation – or DAW – from the 1984-founded company behind the household name of music production tools that is Cubase.

"For the first time that I can think of, a major traditional DAW developer has really taken notice of the game audio world, and has taken initiative to embrace it," asserts Mike Drummelsmith, director, developer relations at Audiokinetic. "People were excited about it even before they had any idea what it all meant."

THE DAW THE MERRIER

And for Drummelsmith, he and his colleagues hope this is just the start of a more general change that will see the world of DAWs established in the realms of music, TV and film crossing over with the working methods of games-makers.

"This should absolutely be viewed as a starting point," he continues. "And the industry should keep the pressure on us, on Steinberg, and on other DAW makers to constantly improve the workflow of game audio professionals even further."

Wwise 2015.1 also adds a healthy scattering of performance upgrades, including promised improvements to flexibility in the tech's conversion settings, 'pin to cache' functionality to allow for streaming optimisations, and substantial Vorbis CPU gains on an array of the tool's supported platforms.

> ***For the first time, a major DAW developer has really taken notice of game audio.***
>
> Mike Drummelsmith, Wwise

Drummelsmith explains: "Our Vorbis decoding improvements and RTPC performance improvements specifically target areas that can give major gains to most teams out there – especially those really pushing the system. Meanwhile, our workflow improvements like batch renaming and some new profiler views really help teams to be able to keep track of hundreds, thousands or hundreds of thousands of actor-mixer objects, events, RTPCs and more, all the while having an easier way to track their behaviour when doing performance analysis and QA."

A PLATFORM FOR CUSTOMISATION

The other most significant update comes in the form of Wwise's new custom platform definitions and profiles, presenting powerful flexibility in a highly fragmented world.

"This basically allows developers to not treat platforms as single monolithic entities," says Drummelsmith. "What does 'Android' mean? A modern handset running Lollipop, or one with a slower processor and older OS?

"This feature allows devs to target subsets of a single platform with a good amount of granularity, optimising the platform settings like compression and codec to improve performance on older hardware, or enabling certain effects on new devices to really show off what they can do."

Wwise 2015.1 might not introduce as big a feature set as 2014.1, but it does tweak and refine in favour of the user's workflows. And it proposes a new era for the traditional DAW, where games development is given a central role to play, and a new status at the very heart of established audio production.

Integration may be the key to that future, and in starting with Nuendo 7 the Audiokinetic team are off the blocks with a convincing opening sprint. ■

www.audiokinetic.com

HEARD ABOUT

The sound of No Man's Sky

John Broomhall speaks to Earcom's Paul Weir about the excitement surrounding Hello Games' intriguing title

Audio expect Paul Wier says No Man's Sky is the "most audicious game" he has ever worked on

NO MAN'S SKY is a title on everyone's lips. Tell us more about your contribution to this project.

My main occupation currently is working on *No Man's Sky* as audio director and sound designer, although I remain involved with Microsoft's Lift London studio. For *No Man's Sky*, I'm responsible for how the game sounds and any specific audio tech development. As the game covers such a large scope, from large-scale space battles to solitary planetary exploration, it presents a massive creative challenge.

***No Man's Sky's* audio has attracted much attention – in the New Yorker, no less! Is that a good thing at this stage or does it create unwelcome auxiliary pressures?**

There's something about the game's vast free-form nature, its outrageous ambition and the way it references classic sci-fi books and films that has caught peoples' attention. That it's being made by such a small indie team also feeds the interest. It's the most audacious game I've ever worked on, although the high expectations set both within the team and by fans can be terrifying – a double-edged sword.

It's amazing that it's been picked up by so many people but when we're trying to innovate and there's only myself on the audio, the pressure is certainly there. Hopefully people will be equally enthusiastic about the game and its audio following the release. I'll certainly be doing my best to ensure that happens.

How would you compare working on a Hello Games-scale title compared to a triple-A big-budget affair?

It's refreshing being able to create and implement sounds without having a cumbersome review process. There's very little wastage – almost every sound I make gets into the game and being the sole sound designer helps maintain a consistency in style. The disadvantage is there's no hiding within a team or being able to call upon help and have a wider perspective so one does feel quite exposed on a project like this.

You're known for a pioneering spirit regarding a generative approach to audio. What does that fundamentally mean for you and, of course, for *No Man's Sky*?

I'm a firm believer that we should experiment with ideas to create soundtracks that are intrinsically game-orientated – and more importantly, I enjoy playing with emergent behaviour-type technology.

I've fallen almost by accident into doing a lot of generative audio work, particularly with the soundscapes I create for retail spaces. It's very interesting how game audio techniques are leaking into the 'real' world and there's a clear parallel between commercial spaces and game levels.

I've been working with Sandy White to build a physically modelled vocal tract that we call VocAlien to create entirely synthesised creature sounds. We planned to try this from the get-go as it was clear that creating sounds for the creatures was going to be problematic. Recording animals is difficult, time consuming and expensive, so there was a strong justification for investing in a modelled approach. VocAlien is a plug-in that sits within Wwise and can also be performed via MIDI – it feels very much like an instrument. In a procedural game with procedural creatures, it makes sense to give them a procedural voice.

For the music, the band 65daysofstatic have written an excellent soundtrack. To complement that, we're making a generative music system called Pulse, which we'll all collaborate on. It's the most flexible generative music system I've designed so far but also, hopefully, easy to use. I want to reduce the amount of effort and learning required to create music in a more granular and adaptive way. ■

John Broomhall is a game audio specialist creating and directing music, sound and dialogue.
www.johnbroomhall.co.uk

MADE WITH MARMALADE

Preparing for Windows 10

We look at how Marmalade has worked with Microsoft to introduce Windows 10 support to its popular tools

Erwin McDaniel
Most Used
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Seismic
Free
File Explorer
Settings
Power
All Apps
Ask me anything
Life at a glance
Cortana
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Welcome Erwin!
With traffic, it's likely to take you 45 minutes to get to your next meeting.

Why Marmalade matters: Marmalade Technologies' close working relationship with Microsoft ensures that developers will be able to use the company's cross-platform developments tools hot on the heels of the Windows 10 launch. **www.madewithmarmalade.com**

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Outlook Mail

Welcome Erwin!
With traffic, it's likely to take you 45 minutes to get to your next meeting.

WINDOWS 10 HAS finally arrived, and already firms are working hard to ensure developers can make the most of it.

This effort is being driven in no small part by Microsoft, keen to improve on the shortcomings of previous operating systems and offer the games industry a fresh audience.

"Microsoft is working to help devs be successful across the platforms and devices they want to target by giving them choice in the tools and code they work with," explains Corey Goff, Microsoft's senior product marketing manager for its games developer platform. "We also recognise that most developers need to target multiple platforms to be profitable and successful."

A key partner in this is Marmalade Technologies. Having worked with Microsoft since 2012, when Windows Phone 8 first enabled C++ apps, the company has been preparing for the launch of Windows 10, ensuring its tools run with the new OS and support Visual Studio 2015.

BRINGING PLATFORMS TOGETHER

Marmalade has also spent months finding ways to help developers target both Windows 10 and the Windows store.

"We've continued our relationship on both a technical and marketing level, collaborating on technology development, product updates and developer evangelism – all designed to ensure Marmalade devs have maximum opportunity to tap into Windows," says COO Donald Beatson.

Goff adds: "Gaming engines such as Marmalade are vital to the success of a vibrant ecosystem for game devs. Cross-platform tools are great for helping developers reach more platforms, and in turn, more gamers. Component tools from anything to audio and physics to networking or multiplayer services also help developers abstract pieces that games need so they can focus on what makes their game special."

> ***With a promised audience of more than 1bn devices, this is an audience no dev can ignore.***
>
> Donald Beatson, Marmalade

With Microsoft's shift towards universal apps that work across all devices, including Xbox One, Beatson believes that Windows 10 is nothing short of a "game-changer".

"It unifies Microsoft's mobile, tablet and desktop platforms making it easier than ever before for developers to target the platform," he says.

"Terry Myerson at Microsoft has promised an install base of more than 1bn Windows 10 devices in two to three years, which is an audience that no developer can afford to ignore – and should bring Windows 10 front and centre in developers' minds when they choose which channels to target."

Marmalade has been working on Windows 10 developer previews since before Christmas, following Microsoft's own build schedule and ensuring its tools were compatible. In fact, a public beta of the Marmalade SDK for Windows 10 went live on the same day as the OS' release at Microsoft's Build 2015 conference in April.

Says Beatson: "The Marmalade SDK's cross-platform capabilities means that targeting Windows 10 will be straightforward – no need to change toolchain, no API changes, and very limited code change required at all. And we plan to continue to work with Microsoft on developer evangelism and offers later in the year to sell the benefits and potential of Windows 10, and encourage more developers to release compelling content to Windows.

"Because of the way Microsoft has built Windows 10, it will be run on a huge range of devices. We hope to establish how easy it makes it to target Xbox One as a new platform – watch this space. We'll also be looking at delivering technology that helps developers optimise their experiences for Windows – with features like DirectX 12 support, monetisation aids like ad networks and analytics support, as well as tech to make it easier to integrate Azure cloud services – a key priority for Microsoft." ■

Marmalade Technologies' COO Donald Beatson believes Windows 10 will be a "game-changer" for developers

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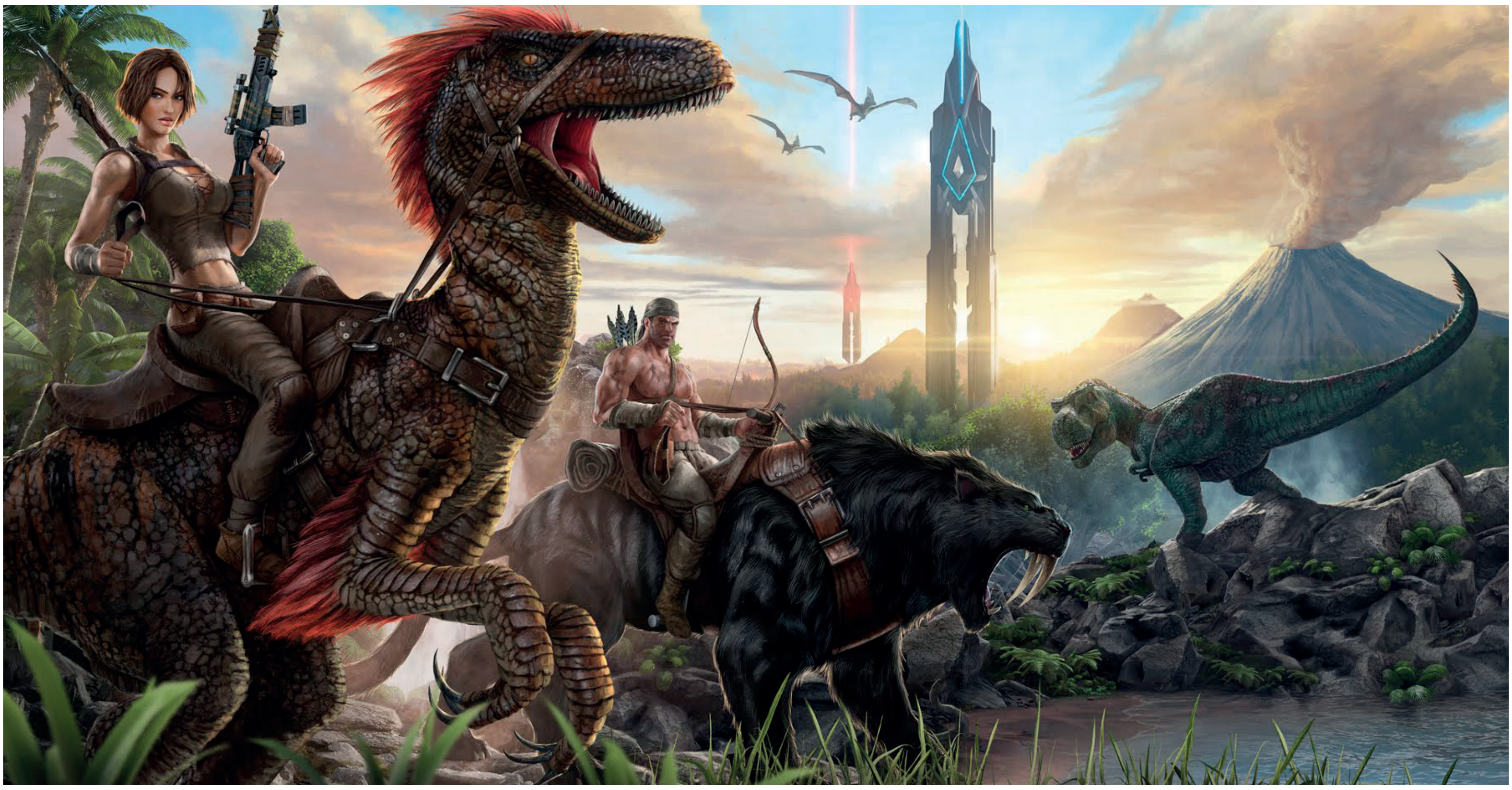
UNREAL DIARIES

Unreal Engine 4 mods take off

Million-selling indie game Ark: Survival Evolved opens up new commercial opportunities for modders. Epic Games tells us more



Having already sold 1m copies in its first 30 days of Early Access, Ark: Survival Evolved will now give players the chance to create their own mods using customised Unreal Engine 4 tools

> ***The UE4 mod tools we're providing are phenomenal and we can't wait to see fans' limitless creativity.***
>
> Jesse Rapczak, Studio Wildcard

UPCOMING EPIC ATTENDED EVENTS

GDC Europe & Gamescom
August 3rd to 9th, 2015
Cologne, Germany

SIGGRAPH
August 9th to 13th, 2015
Los Angeles, California

Casual Connect
August 11th to 13th, 2015
San Francisco, California

*Email **licensing@epicgames.com** for appointments and sign up for Epic's newsletter at unrealengine.com.*

STUDIO WILDCARD HAS partnered with Epic Games to bring the full power of Unreal Engine 4 tools and development resources to the *Ark: Survival Evolved* modding community with one of the first custom mod editors. The open-world dinosaur survival game achieved wild success in just 30 days of Early Access on Steam, selling more than 1m copies.

"*Ark* provides a brilliantly creative universe for modding, and a wealth of beautiful environments and dinosaur content to build upon," says Tim Sweeney, founder and CEO of Epic. "Many of us here began in the mod community, so we're grateful to see Wildcard open up their creative work to a new generation of programmers, artists, and designers."

Anyone who has purchased *Ark* can begin modding immediately with the free UE4 mod editor. Wildcard offers a "How To Mod" tutorial, and both Epic and Wildcard support the Unreal Engine Ark Modding forum. Videos about the process can be found on **youtube.com/unrealengine**. Devs can find content in the Unreal Engine Marketplace, and then share their creations with the *Ark* player community using Steam Workshop.

"As we've opened up the world of *Ark* to everyone, we've been seriously on the edge of our seats with anticipation. The amazing gameplay ideas lighting up the forum conversations can be turned into reality right away," remarks Jesse Rapczak, co-founder and co-creative director of Studio Wildcard.

"The UE4 mod tools that we're providing are phenomenal, and we can't wait to see the limitless creativity of our fans come to life in fantastic new ways."

ALL THE MOD CONS

A thriving mod community can act as a force-multiplier on a game, often going far beyond the original developer's creation both in size and scope.

UE4 has been designed with modding in mind. As such, anyone can access the complete UE4 source code, easy-to-use tools, tutorials and documentation for free.

Devs can distribute their games, and mods for them, to anyone and through any channel. They can redistribute customised versions of the Unreal Editor, and, if desired, UE4 source code freely to the UE4 community through Epic's GitHub repository and the Marketplace.

It is up to the developer of each moddable UE4-based game to decide whether and how mods may be sold for that game. ■

Epic is hiring. To find out more visit: **epicgames.com/careers**

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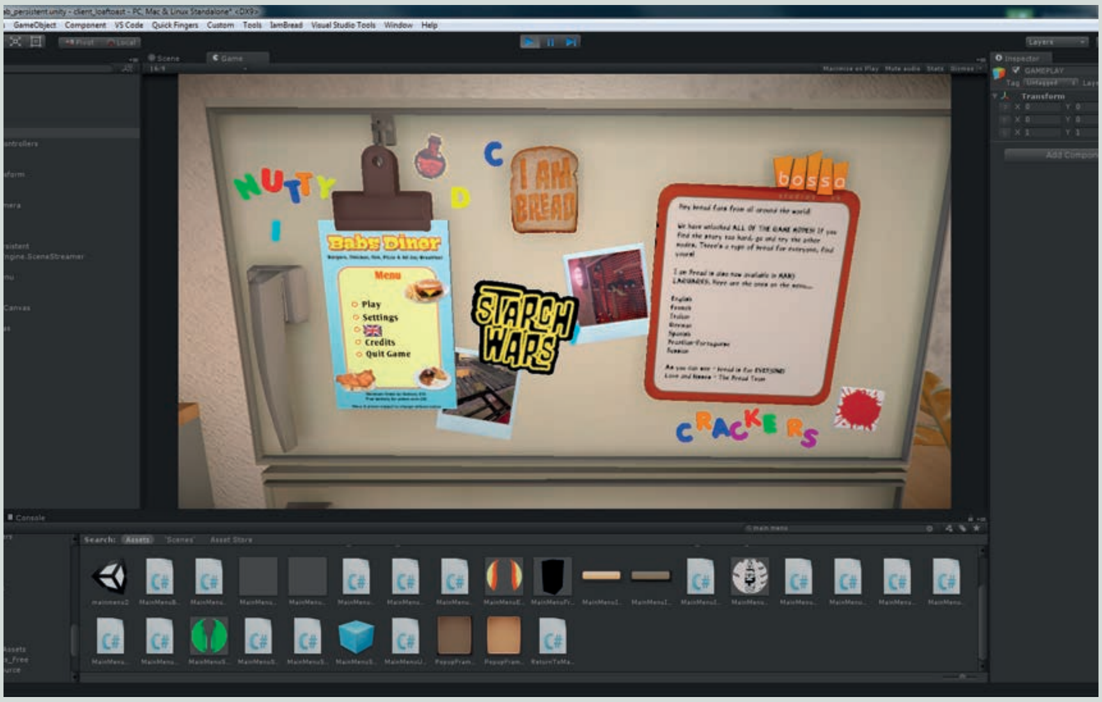


UNITY FOCUS

A recipe for greatness

We catch up with Bossa Studios to find out the origins of its wacky new IP, I Am Bread

SURGEON SIMULATOR FIRMLY established UK developer Bossa Studios as a creator of quirky, entertaining and downright weird titles – but its slapstick surgical antics are nothing compared to *I Am Bread*.

This bizarre, physics-centric adventure puts players in control of a solitary slice of bread as they stretch, flip and bend their way around an abandoned kitchen, as well as the rest of the house. It's the type of gameplay premise that only a YouTube trailer can do justice.

According to game programmer Murillo Titon de Souza, the origins of this title were surprisingly mundane.

"If I remember correctly, it came from [Bossa Studios' game designer] Luke, who just wanted to come up with a game where you would play as a slice of bread," he says.

"After asking 'what would bread want most in the world?', it was decided that the objective of the game would be to become toast, and that it would not just use a conventional 'press forward to move forward' control scheme, but rather something that would try to mimic the way an actual piece of bread might move around."

With the concept in place, all that was required was an engine that could handle the odd way in which the studio imagined a slice of bread would move, one that would allow the team to get a build up and running quickly in order to establish whether the idea had merit.

"Unity allows us to quickly prototype things, because it's very easy to set up new projects and get them to a state where we can prove the concept," explains de Souza.

"*I Am Bread* started as a small prototype that was made in less than 48 hours during a game jam, something the prototype team would not have been able to achieve without using Unity.

> ***"One of Unity's key strengths is that it's very accessible, so get out there and start making games."***
>
> Murillo Titon de Souza, Bossa

"Furthermore, Unity offered all the features that we expected would be necessary for this project, and our entire code team is proficient with it, which means anyone could easily jump into the project if needed."

The physics engine proved to be one of the most useful features of Unity for Bossa, allowing them to define the unique way in which players traverse the terrain.

The editor also allowed artists to easily set up large sections of the environments, and Unity's multi-platform support would help the studio reach as wide an audience as possible.

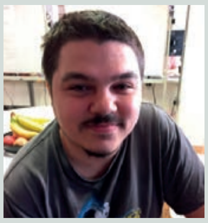
While Bossa is staffed by plenty of experienced games developers, the programmer believes that Unity would also help newcomers and start-ups create a similar game just as efficiently, and urges aspiring games-makers to try it.

"One of Unity's key strengths in my opinion is that it's very accessible, so get out there and start making small games, and you will pick up on the basics in no time," de Souza advises.

As for *I Am Bread*, the game's impact has been just what Bossa hoped for. The title grabbed the attention of both press and players alike, and dispelled much of the scepticism that surrounded its initial reveal.

"The responses have ranged from people laughing out loud all the way to some of them smashing gamepads in rage, as YouTuber Markiplier did in one of his videos," he says.

"Overall, it seems the game was well received by those who tried it, with lots of people being surprised that it wasn't just a shallow 'YouTube bait' kind of game. That said, the challenge of mastering a novel control scheme proved to be too frustrating for some." ■



Bossa programmer Murillo Titon de Souza says the initial prototype for I Am Bread was built within 48 hours during a game jam

I Am Bread
Developer: Bossa Studios
Publisher: Bossa Studios
Formats: PC
www.iambreadgame.com

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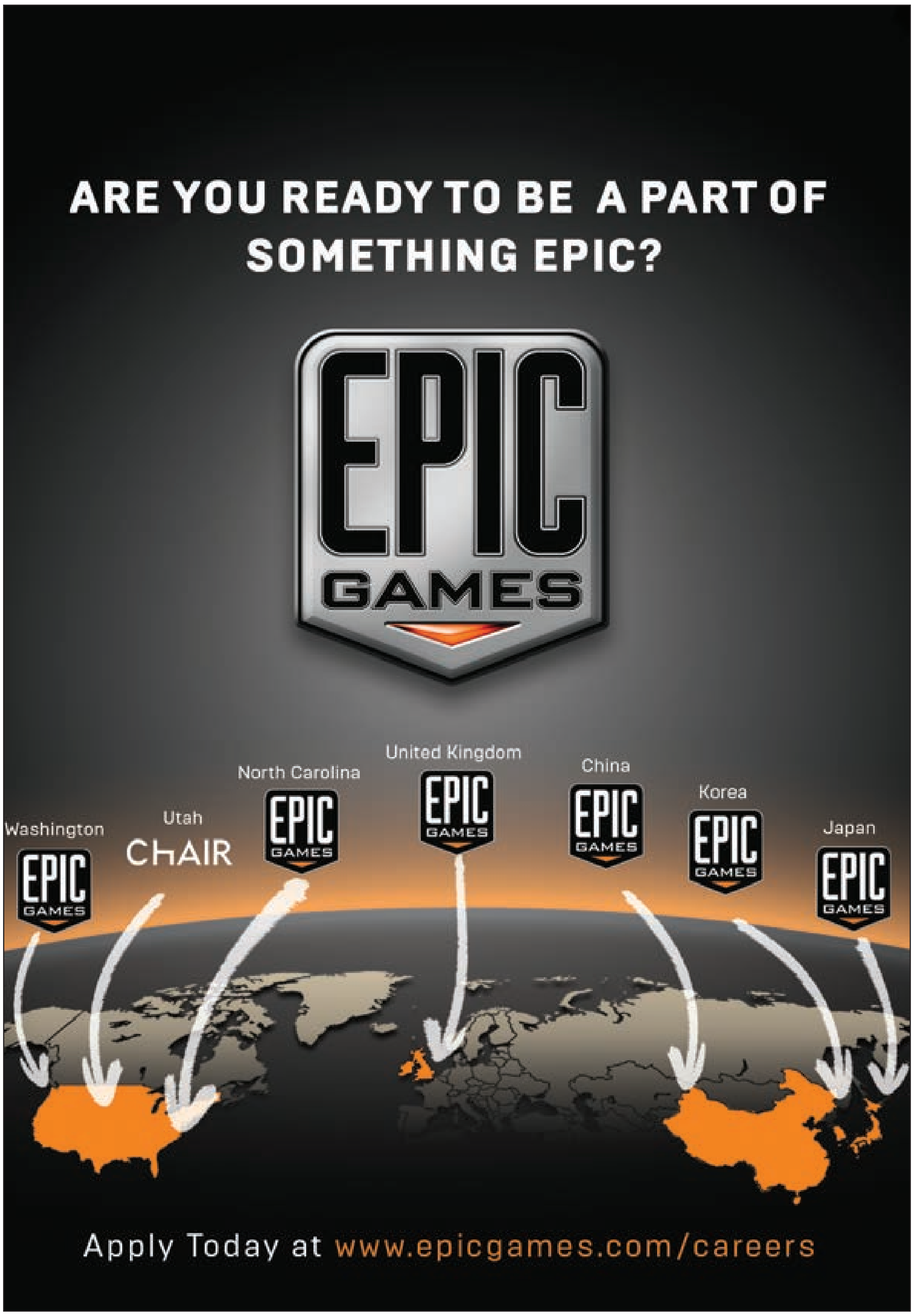
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P64

TOOLS SPOTLIGHT:
Haxe

P65

STUDIO SPOTLIGHT:
Roll7

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E: info.soundcuts@gmail.com
W: www.soundcuts.net

A NOMINEE AT this year's Develop Awards, Soundcuts has been offering its array of services since 2011 from its base in London.

Its offerings include sound effects design including foley, recording, post-production, implementation and mixing, and speech. For the latter, the firm works on casting, recording, direction and editing.

> ***We love starting early to help you mould the audio direction with style guides.***
>
> Adele Cutting, Soundcuts

When tasked with creating a game's music, Soundcuts also works with a range of industry professionals to find the right composer for the job, with its related services including music editing, budgeting and managing recording sessions – including orchestral and orchestration.

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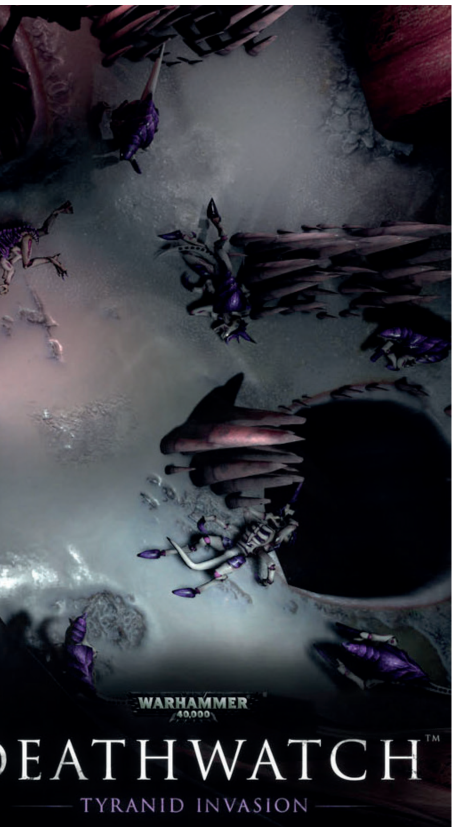

"We love starting early to help you mould the audio direction by developing style guides or previs soundtracks," says Soundcuts company director and Develop Award-nominated Adele Cutting (*pictured below*), who previously worked for 15 years at EA prior to setting up her own studio.

"We can implement the audio assets into a middleware system, and then sit down with your coders to get them playing as designed in the game. We also have an audio programmer and can provide the complete speech production pipeline from casting through to post-production.

"We've also been called in to firefight at the end of projects too and will offer advice on budgeting, project management and scheduling."

The company works on projects both big and small, and is open to delivering a small subsection of audio required by a developer, or handling everything that is required from a studio. Cutting says that if required, the studio also expands its team during particularly busy periods.

Its recent projects include Rodeo Games' *Warhammer 40,000 – Deathwatch: Tyranid Invasion* (*pictured left*), for which Soundcuts provided the sound effects and speech, and Somethin' Else's *Audio Defence: Zombie Arena,* where it also provided sound effects. And there are plenty more familiar names being added to Soundcuts' list of clientele.

"We're currently doing all the sound on *The Room 3* with Fireproof, which includes some really delicate sound recordings mixed with more ambient, synthesised sound," says Cutting.

"We're also working on very exciting projects for Wish Studios, Microsoft and Gamesys."

> **“*We have specialists in every area and we can work with other suppliers.*”**
>
> Adele Cutting, Soundcuts

Soundcuts is unlike some other audio firms, in that it offers a vast array of audio services, from voice acting and direction to sound design and helping find the right composer and music.

Cutting says by offering all of this, it can work like a sound department for games companies that don't have one, while also providing a one-stop shop for a developer's audio needs.

"All these individual elements work together to create the soundtrack," she says. "We have specialists working in every area. We're happy to provide one area to clients too and we're happy to work with other suppliers. We have an in-house composer, but also we can source others. ■

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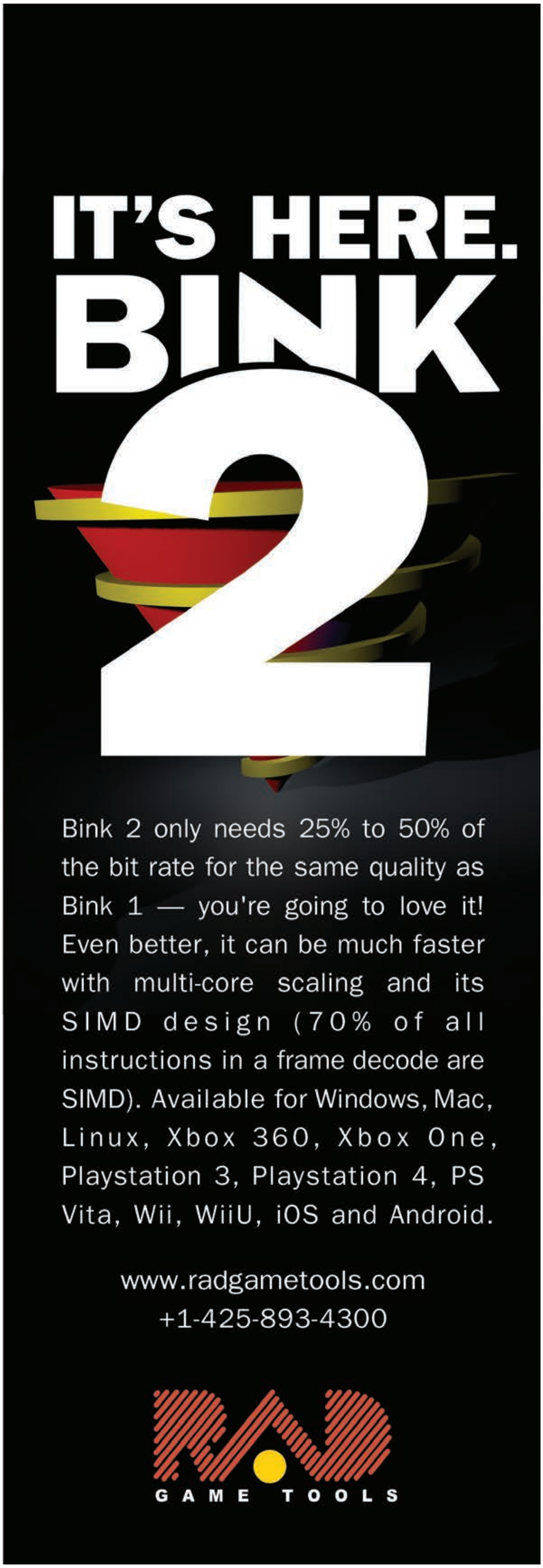

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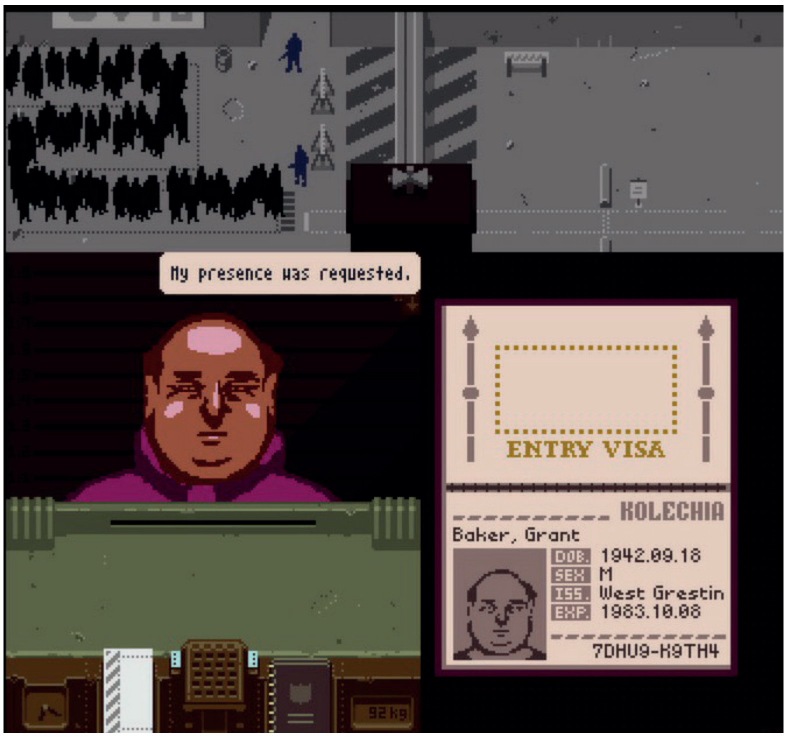
TOOLS SPOTLIGHT

This month: **Haxe**



Free open-source development tool Haxe has been used in games such as Lucas Pope's Papers, Please

MANY TOOLS ARE increasingly going free and open-source, but Haxe has been doing it for years.

It is a programming language and set of tools that allows developers to create cross-platform applications by using code generation from Haxe to languages such as JavaScript, C++, Java, Flash, C#, Neko and Python. In essence, it allows devs to write once in a cross-platform language, and release their game on numerous platforms such as browser, iOS, android and PC.

It's a toolkit that's been used for a number of popular games, including Lucas Pope's *Papers, Please* and Shiro Games' *Evoland*. It's also been used by companies such as Nickelodeon and Disney to write more than 150 HTML5 games.

There are also Haxe game frameworks available, such as OpenFL, and others including the in-development Heaps.io, that are GPU-oriented and support both 2D and 3D graphics.

Given its usage by indies and some notable large companies, why was Haxe made free for all and open-source to begin with?

"It allows us to bring a better technology that hundreds of developers are contributing back to, which is much more efficient than keeping an in-house closed-source technology," says Haxe creator Nicolas Cannasse, who is director at the Haxe Foundation, which is charged with driving its development.

"Games, website and app developers are competing on content, so having good tools available is a win for everyone."

> ***Games devs are competing on content, so having good tools is a win for everyone.***
>
> Nicolas Cannasse, Haxe

The Haxe Foundation is supported by some of its strategic partners, such as TiVo, Prezi and Motion-Twin, and puts any money it gets from its partners into improving or developing new uses for the tech.

To this end, in future, Cannasse says the Haxe Foundation plans to reach other audiences than games developers. He says it can be used for websites and app development, and believes there's a benefit for using it as soon as cross-platform performances are required.

"It's also quite a good programming language on its own," he states "Devs get to love it quite quickly." ■

STUDIO SPOTLIGHT

This month: **Roll7**

Roll7
Astra House
23 – 25 Arklow Road
New Cross, London
SE14 6EB

E: tom@roll7.co.uk
W: www.roll7.co.uk
TW: @thomas_hegarty

The trio behind Roll7 say that work on OlliOlli 2 and Not A Hero has made the Develop Award-winning studio very insular for the past couple of years. The team is now keen to get out and meet more devs

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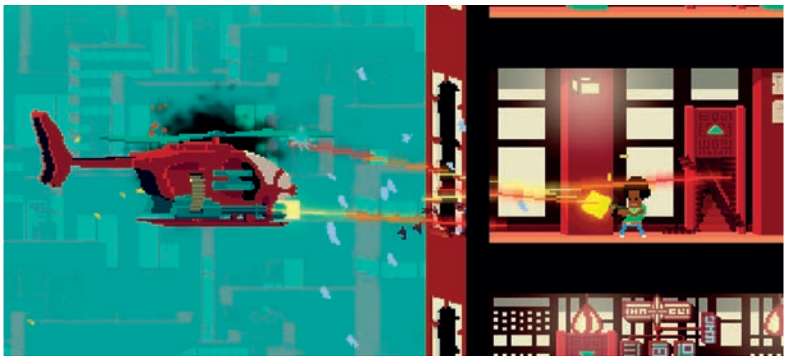

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Aside from winning the 2015 Develop Award for New Studio in July, what was the biggest development for Roll7 over the past year?

Tom Hegarty, Director: Developing and releasing two games simultaneously was the certainly the most difficult thing of the past year, if not in the company's entire history.

We had teams working on both *OlliOlli 2* and *Not A Hero* – albeit a very small one on the latter – but myself, Simon and John had to stretch ourselves across both. That doesn't sound so bad but when you combine that with long hours and lots of creative wrangling and arguing, switching between the two became very challenging.

The fact that we managed to release them and both were successful is something we're very proud of – although we probably won't be doing it again any time soon.

What are your goals and priorities for the year ahead?

Never make two games at the same time again. We're spending the next few months prototyping a number of ideas internally, which we hope will form the basis of our next project.

We also want to get out and about again, meet other people in the industry, and learn more about the latest developments in games and other creative industries. The last two and half years have been very insular and it's really important for us to be connected to the world at large to make sure that what we're doing is fresh and hopefully relevant.

What makes Roll7 different from other studios?

Myself, John and Simon have been running businesses together since 2003, many years prior to Roll7 starting. In doing so, we've been through so many creative, legal, project management and financial processes. All of those experiences have fed into the Roll7 of today.

When we're developing, the creativity always comes first but we also have to balance that against a realistic backdrop of funding and our platform holder's needs. That makes us very focused on the core elements of the gameplay and ensures we only develop the key parts of the game. It's so easy to get bogged down in minutiae: sometimes the smallest detail can be so important but it's equally important to know when you need move on and look at the bigger picture.

We also tend to solely focus on mechanic. You might look at *Not A Hero* and disagree, but Bunnylord was a late addition to the party and it wasn't until the mechanics were solid that he made his time-travelling appearance. If you have tight mechanics, the game should speak for itself. *OlliOlli 1* is not the prettiest game but the controls are what made it a success. *Not A Hero* was an interesting avenue for us to explore as we've never touched narrative before.

What did you learn from the success of *OlliOlli* and how did you apply that to its sequel and Not A Hero?

The key learning from *OlliOlli* was realising just how different and unique its control system was. Learning a new control scheme is akin to learning a new language and as you develop a game, you get very good at that language very quickly.

> ***"Developing two games at the same time was the most difficult thing we've done in the firm's history."***
>
> Tom Hegarty, Roll7

Your main task is then distilling that language down into a clear learning process for the user, helping them develop at an appropriate pace whilst feeling rewarded for beating challenging levels. We tried to apply this to both *OlliOlli 2* and *Not A Hero*. You can see It to a degree, especially in the first two levels of *Not A Hero* and the skatepark mode in *OllliOlli 2*. However, we are still learning and see this as one of our main challenges moving forward.

Are you planning to expand at all?

It really depends on the next project. Right now there is just five member of Roll7. The three directors, our artist Jake and Sam, our QA and gameplay tester. That's a good sized team to develop some good prototypes.

In terms of new people, at this point we're looking for very experienced people. We've spent too much time trying to solve problems that devs solved years ago. Working with these people will allow us to focus on the core creative and mechanical elements. Having said that we're always looking for new talent with new ideas and a passion for their art. Jake and Sam are both young and recently out of education.

Tell us something no-one knows about your studio.

During the deepest darkest moments of crunch late last year and early this year, the one song which got everyone going and happy again was the Pina Colada Song by Rupert Holmes. ■

GAME DEV FAMILY TREE

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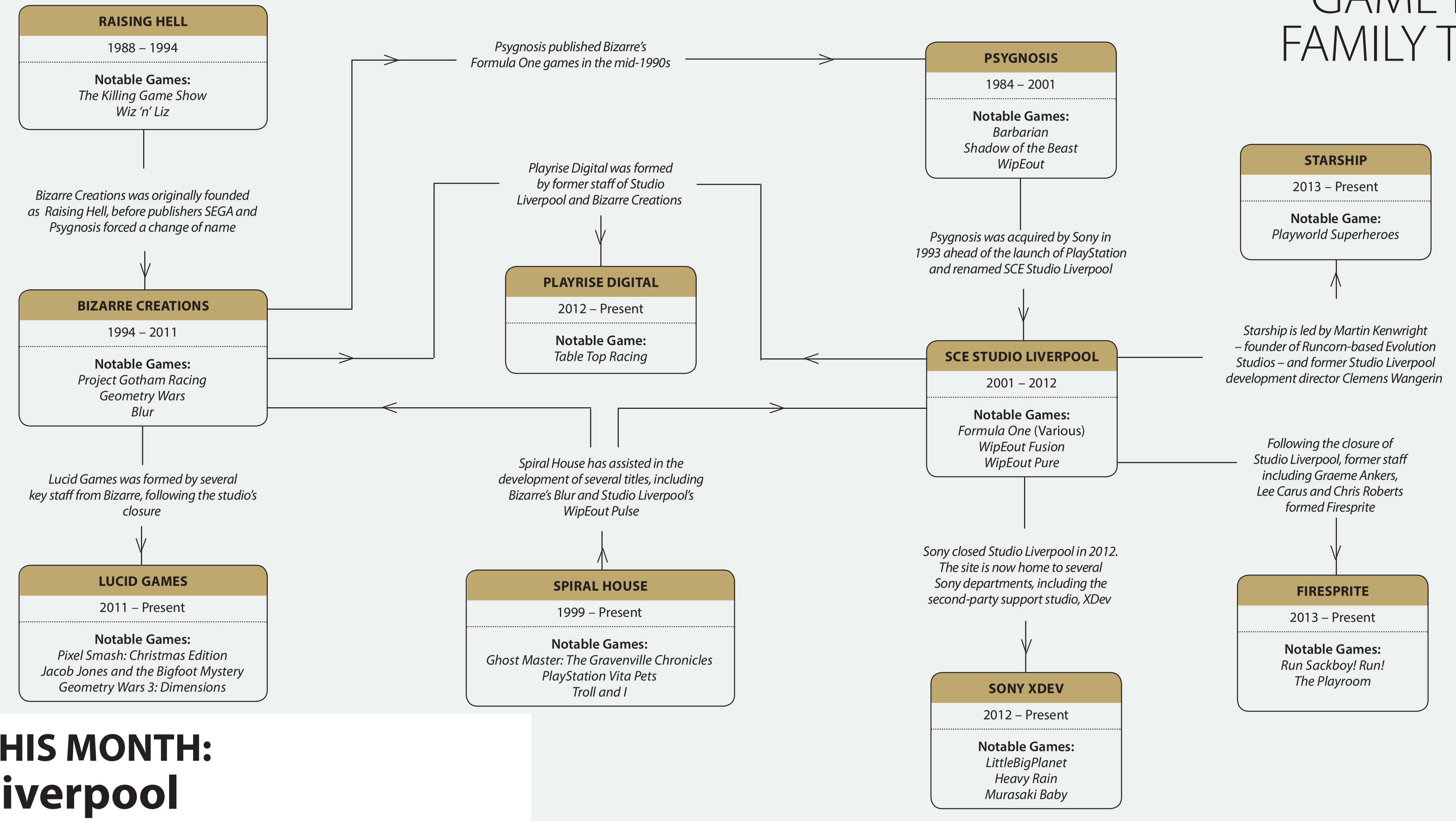
THIS MONTH:
Liverpool

Lee Bradley explores the thriving hub of games development studios found on the banks of the River Mersey.



RAISING HELL
1988 – 1994
Notable Games:
The Killing Game Show
Wiz 'n' Liz

Bizarre Creations was originally founded as Raising Hell, before publishers SEGA and Psygnosis forced a change of name

BIZARRE CREATIONS
1994 – 2011
Notable Games:
Project Gotham Racing
Geometry Wars
Blur

Lucid Games was formed by several key staff from Bizarre, following the studio's closure

LUCID GAMES
2011 – Present
Notable Games:
Pixel Smash: Christmas Edition
Jacob Jones and the Bigfoot Mystery
Geometry Wars 3: Dimensions

Psygnosis published Bizarre's Formula One games in the mid-1990s

Playrise Digital was formed by former staff of Studio Liverpool and Bizarre Creations

PLAYRISE DIGITAL
2012 – Present
Notable Game:
Table Top Racing

Spiral House has assisted in the development of several titles, including Bizarre's Blur and Studio Liverpool's WipEout Pulse

SPIRAL HOUSE
1999 – Present
Notable Games:
Ghost Master: The Gravenville Chronicles
PlayStation Vita Pets
Troll and I

PSYGNOSIS
1984 – 2001
Notable Games:
Barbarian
Shadow of the Beast
WipEout

Psygnosis was acquired by Sony in 1993 ahead of the launch of PlayStation and renamed SCE Studio Liverpool

SCE STUDIO LIVERPOOL
2001 – 2012
Notable Games:
Formula One (Various)
WipEout Fusion
WipEout Pure

Sony closed Studio Liverpool in 2012. The site is now home to several Sony departments, including the second-party support studio, XDev

SONY XDEV
2012 – Present
Notable Games:
LittleBigPlanet
Heavy Rain
Murasaki Baby

STARSHIP
2013 – Present
Notable Game:
Playworld Superheroes

Starship is led by Martin Kenwright – founder of Runcorn-based Evolution Studios – and former Studio Liverpool development director Clemens Wangerin

Following the closure of Studio Liverpool, former staff including Graeme Ankers, Lee Carus and Chris Roberts formed Firesprite

FIRESPRITE
2013 – Present
Notable Games:
Run Sackboy! Run!
The Playroom

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Publisher
Michael French
mfrench@nbmedia.com

Editor
James Batchelor
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Craig Chapple
cchapple@nbmedia.com

Contributing Editor
Will Freeman
wfreeman@nbmedia.com

Sales Executive
Charlotte Nangle
cnangle@nbmedia.com

Designer
Nikki Hargreaves
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Production Executive
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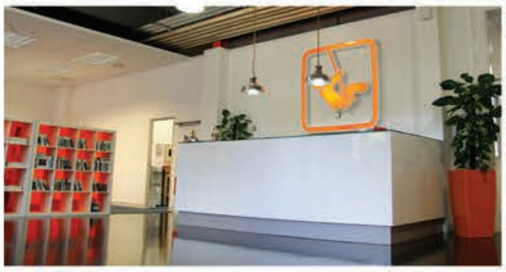

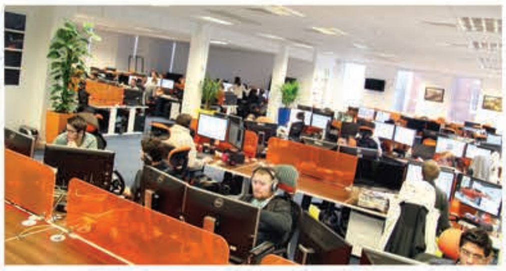

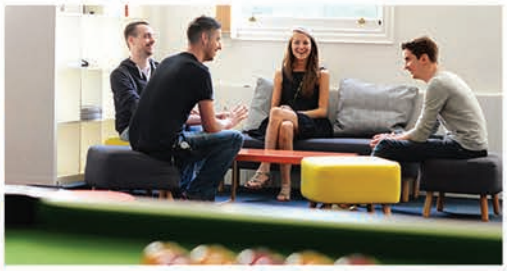

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Senior Systems Engineer (Contract)
Senior Rendering Engineer (Contract)

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PRODUCTION:

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Senior/Lead VFX Artist
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Audio Designer (Contract)

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